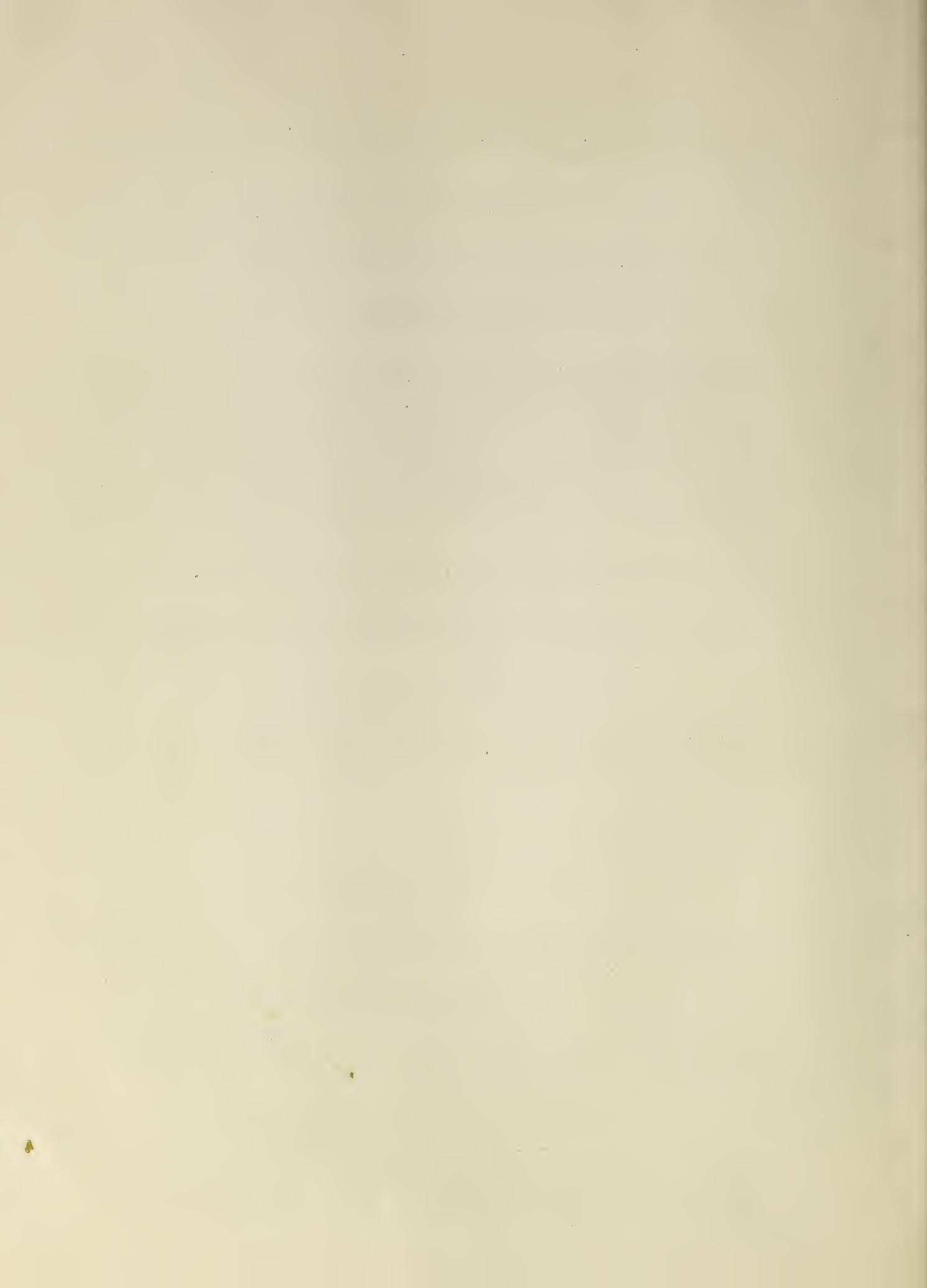


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THE INSECT PEST SURVEY
BULLETIN

A periodical review of entomological conditions throughout the United States
issued on the first of each month from March to December, inclusive.

Volume 7

July 1, 1927

Number 5

BUREAU OF ENTOMOLOGY
UNITED STATES
DEPARTMENT OF AGRICULTURE
AND
THE STATE ENTOMOLOGICAL
AGENCIES COOPERATING

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OUTSTANDING ENTOMOLOGICAL FEATURES IN THE UNITED STATES FOR June, 1927

White-grub damage in the upper Great Plains has been quite severe, particularly in Iowa and southeastern Nebraska.

Cutworms have been very troublesome in the Mississippi Valley and Great Plains States. Reports of serious injury have been received from Louisiana, Mississippi, Arkansas, Missouri, Iowa, Kansas, Nebraska, Minnesota, Indiana, and North Carolina. In the Mississippi Delta cutworms are causing very considerable damage on the lands from which the water has recently receded.

Wireworms have been attracting considerable attention in widely scattered regions and on a marked variety of crops. Reports of damage have been received from Montana, Kansas, Nebraska, Minnesota, Indiana, North Carolina, and Virginia.

The Hessian-fly situation remains practically unchanged with the exception of a noticeable increase of infestation in the southern part of Illinois.

The chinch bug has received a very decided setback in the East-Central States from the continued wet weather. On the other hand, in parts of Nebraska the destructive abundance of this insect is very materially increased, and cornfields adjacent to volunteer wheat are suffering severely. Heavy rains have reduced the serious infestations in the eastern half of Kansas.

The plains false wireworm is not generally so troublesome as it has been during the last few years, although reports of damage have been received from Kansas and Nebraska. Another species of false wireworm, Eleodes tricostata, has been found attacking corn in Nebraska. This is apparently the first record of this insect as of economic importance.

The corn ear worm is now occurring in serious numbers in the South Atlantic and Gulf States as well as in southern California. This should be the forerunner of successive ear-worm infestations northward.

The stalk borer is generally prevalent over the entire upper Mississippi Valley. Reports of unusual abundance of the young larvae have been received from Indiana, Illinois, Kansas, Nebraska, and Minnesota.

Very serious damage to corn in the southern part of Mississippi by the lesser corn stalk borer is reported for the first time in several years.

Coincident with the cool, wet weather of this spring, reports of damage by the seed-corn maggot have been received from Montana, South Dakota, Minnesota, Nebraska, Indiana, and Maryland.

The lined stalk borer has been causing considerable injury to corn from western New York to southeastern Minnesota.

The alfalfa weevil was much later in development this year than usual, and though extremely numerous in the fields in Nevada and Utah, it has done comparatively little damage to the first cutting. Cool weather at cutting time will undoubtedly result in very serious damage to the second crop.

An interesting account of very serious damage to alfalfa plants by the larvae of a crane fly has been received from Indiana.

Aphids on deciduous fruit tree, though reported as quite serious in a number of places, do not seem to be abnormally abundant.

The codling-moth situation seems to be slightly more serious in the East-Central States, becoming less troublesome from Illinois westward. In the Pacific Northwest the general situation is very favorable.

The eastern tent caterpillar is still very numerous throughout New England and the Middle Atlantic States.

Preliminary surveys indicate that the plum curculio will be more prevalent in Massachusetts than last year. This same condition prevails southward to Georgia and in parts of Texas.

The Harlequin bug is apparently in usual abundance over the Gulf States. A rather unusual observation was received from Texas where the insect did serious damage to the blossoms of lilac.

The Mexican bean beetle throughout the southern part of its range is appearing in destructive numbers in bean fields.

The boll-weevil situation as observed by the Federal Laboratory at Tallulah, La., will not be released in time to be included in this issue of the Survey Bulletin. The June 1 record indicates that greater survival of weevils occurred at all points where observations were made with the exception of Auburn, Ala., Baton Rouge, La., and Experiment, Ga. Reports from North Carolina indicate that survival was unusually heavy. Similar records have been received from practically all sections of Mississippi with the exception of the Delta region.

The cotton flea hopper is generally not very abundant in the cotton fields, although present in large numbers on other plants. Some damage was reported from North Carolina.

Only one report, and that doubtful, of the cotton leaf worm has been received so far this year, and that from Tennessee.

The periodical cicada is appearing in very limited numbers in parts of West Virginia. Some heretofore unrecorded localities have been observed this season.

Considerable trouble from the white-marked tussock moth is anticipated in western New York, in Ohio, and in Indiana.

The Mexican bean beetle has been discovered on the government farm at Arlington, Virginia, adjacent to Washington, D. C.

The fall cankerworm seems to be in epidemic abundance in the New England States, New Jersey, and Pennsylvania. In the last State the infestation is reported as the worst observed in the past 40 years.

Aphids on maples are extremely abundant in Ohio and Indiana, where they are causing considerable annoyance in the cities by heavy excretions of honeydew.

Several cases of tularaemia, two of which terminated fatally, have been reported from Arkansas.

Screw-worm conditions are considerably worse than usual for this time of the year in parts of Texas, occasioning heavy losses of lambs and young calves.

White ants continue to be a serious feature in the maintenance of wooden structures over a wide area. Reports range from Indiana to Nebraska and southward to Kansas.

An unusual household pest in the form of a pemphredonid wasp is reported as damaging porch flooring in Mississippi.

OUTSTANDING ENTOMOLOGICAL FEATURES IN CANADA FOR JUNE, 1927

New severe outbreaks of the European apple sucker have appeared between Berwick and Middleton, Nova Scotia, some apple orchards being 100 per cent infested. Recently, the insect was also found on Prince Edward Island.

The green peach aphid, Myzus persicae Sulz., was exceedingly prevalent in the southern Okanagan Valley, British Columbia, this spring, being particularly destructive to blooms and young fruits.

There is a widespread and rather heavy infestation of the rose leaf hopper in western Nova Scotia, affecting roses and apple.

Large numbers of the predacious mite Hemisarcoptes malus Shimer have been found on trees infested with oyster-shell scale, in the Coldstream district, British Columbia. This mite is believed to be an important factor in the control of the scale in the Okanagan Valley.

Strawberry leaf-rollers caused considerable damage to the foliage and blossom buds of strawberries in sections of the Okanagan Valley, this spring.

The fall cankerworm has infested 75 per cent of the apple orchards in the Annapolis Valley, and the Pictou district, Nova Scotia, causing severe defoliation in untreated orchards. The infestation, which has been increasing in intensity during the past few years, is now probably at its maximum.

The eye-spotted bud-moth, Spilonota ocellana D. & S., is infesting a much larger area in the Annapolis Valley than during any previous season, and the intensity of infestation is the greatest so far experienced.

White grubs caused considerable injury to roots of young fruit trees at Edgewood, British Columbia. They have also been reported as unusually abundant in the Treesbank district, Manitoba.

The beetle Hylastinus obscurus Marsh, was taken early this spring in roots of red clover in The Grindrod district, British Columbia, where it was causing severe damage to clover.

Spittle insects have been reported in unusual abundance on grasses and garden plants, over a considerable territory in southern Ontario.

An arthropod, Scutigerella immaculata, belonging to the class Symphyla, has been causing serious damage to young mangels in the Victoria district, British Columbia, where it is becoming a pest of increasing importance.

A species of cedar tip borer is generally infesting white cedars throughout New Brunswick. The heaviest infestations were noted in Kings County, where cedars over a considerable area have been largely defoliated.

Large areas of balsam are reported dead or dying on Hunters Range, northeast of Mara, British Columbia, as a result of the attacks of a bark beetle, Dryocoetes confusus Sw.

The early aspen leaf curler, Exentera oregonana Wlshm., has severely infested the foliage of poplars, in south-central Saskatchewan, many trees having 50 per cent of their leaves curled.

The elm bark louse is reported for the first time in outbreak form at Powell River, British Columbia.

GENERAL FEEDERS

GRASSHOPPERS (Acrididae)

Nebraska H. H. Swenk (May 25-June 25): Grasshoppers are distinctly subnormal in abundance over the State according to information obtained up to this time.

MORMON CRICKET (Anabrus simplex Hald.)

Montana W. B. Mabey (June 17): Mormon crickets are more abundant than they were last season. They are about three weeks later in their development owing to the late spring conditions. To date we have been able to protect cultivated areas, the only damage so far being to range land.

WHITE GRUBS (Phyllophaga spp.)

Massachusetts A. I. Bourne (June 20): The first May beetles were noticed May 3 to 4. These have been unusually scarce this season.

Iowa C. W. Ainslie (June 3): The larvae of the beetles are everywhere in evidence this spring, and promise great injury to young corn as well as gardens. Very few adults have flown as yet. Probably hindered from emerging by continued cool nights. The larvae are of two broods, large and medium sized.

Nebraska H. H. Swenk (April 25-May 25): During the entire period covered by this report there have been a great many complaints of damage by white grubs in southern Nebraska. Some of these relate to injury in gardens, but most of them are complaints of injury to strawberry beds and to privet hedges. Damage of this sort has been reported as far to the west as Harlan and Furnas Counties and is still in progress. (May 25-June 25): Complaints of damage by white grubs in southern Nebraska continued to be received until toward the middle of June. These relate chiefly to injuries to strawberry beds.

MARCH FLY (Bibio albipennis Loew)

Nebraska H. H. Swenk (April 25-May 25): During the third week in May an abundance of the March fly, Bibio albipennis, was reported from Kearney and Buffalo Counties. The insects occurred by the thousands in the field, causing inquiries from farmers as to prospective injury of some sort to crops.

OUTWORMS (Noctuidae)

Iowa C. W. Ainslie (June 3): Outworms are extremely numerous in northwestern Iowa this spring, and are doing widespread injury to both garden plants and field crops. The identity of the species involved has not been established, but it is quite certain that

several species are represented. Many gardens have been practically ruined by these worms.

Missouri

A. C. Burrill (June 10): Cutworms have not been noticeable this spring.

Mississippi

R. W. Harned (June 22): Cutworms have caused considerable damage in the flooded section of the Delta. Some fields of cotton and corn have been replanted twice, and even three times in a few cases. Observations and collections by State Plant Board inspectors show that the most abundant and widely distributed species is the greasy cutworm, Agrotis ypsilon Rott. The yellow-striped armyworm or cotton boll cutworm, Prodenia ornithogalli, has also been found in injurious numbers. A severe outbreak of the southern grass worm, or fall armyworm, Laphygma frugiperda, has occurred in Yazoo City, and preparations are being made to fight the succeeding generations. Little or no parasitism was observed.

WIREWORMS (Elateridae)

Montana

W. B. Mabey (June 17): Wireworms are abundant this season, considerably more complaints having been received to date than last year.

SPITTLE INSECTS (Cercopidae)

Missouri

A. C. Burrill (May 31): Cercopid nymphs, greenish stage, are often more than 3 per square foot where grass is not cut, as in pastures and fence rows. This is about the thickest I have ever noticed them at this time of the year. Probably this is because of the unusually wet season.

CEREAL AND FORAGE - CROP INSECTS

WHEAT

HESSIAN FLY (Phytophaga destructor Say)

Illinois

T. P. Flint (June 20): The Hessian fly has increased somewhat in the southern part of the State, but from present information it has not become more abundant in the central or northern sections.

Nebraska

M. H. Swenk (May 25-June 25): The Hessian fly, probably largely as a result of the continued general observance by wheat growers of the practice of reasonably delayed sowing, has apparently not been able to build up an abundance productive of commercial damage on the winter wheat crop of 1926-27, now in the making. At least so far this spring only one instance of noticeable damage by this pest has been reported, that being in Johnson County near Tecumseh.

Kansas J. W. McCulloch (June 20): We have made a thorough survey throughout the wheat belt and find the Hessian fly serious in 30 south-central counties of the State. In Ellsworth County 34 per cent of the stems were broken over on June 8. Many fields in the area show 10 to 25 per cent broken straw.

CHINCH BUG (Blissus leucopterus Say)

Illinois W. P. Flint (June 20): June has been, on the whole, a very wet month, and the areas which were quite heavily infested with chinch bugs last season are now more nearly free from this insect than has been the case for a number of years. The chinch bug on the whole has received a very severe setback this season.

South Carolina J. O. Pepper (June 10): The infestation of this insect in the Piedmont section is increasing rapidly. Some small areas in cornfields have already been seriously injured. The majority of infestations have started from near-by grain fields that have been harvested.

Nebraska M. H. Swenk (May 25-June 25): The cool, wet spring slowed up the progress of the first brood of the chinch bug in southeastern Nebraska, and no doubt a large percentage of the brood has succumbed to the continued unfavorable weather conditions. Nevertheless, there remain plenty of chinch bugs in many fields of winter wheat that will probably be heard from when the fields are cut next month. Up to this time the most serious injury by the chinch bug has taken place in connection with young corn that was planted on ground that was in wheat last year, and where a heavy growth of volunteer wheat furnished food and good cover during the past winter. In a number of instances such corn is now heavily attacked by young bugs, and the plants have been stunted and in some fields quite killed out by the attacks of the growing young bugs.

Kansas J. W. McCulloch (June 20): There is a general infestation of the chinch bug over the eastern half of the State. The situation appeared very serious a few weeks ago, but cool weather with abundant rain has improved conditions.

WHEAT STEM MAGGOT (Meromyza americana Fitch)

Nebraska M. H. Swenk (May 25-June 25): Some injury by the wheat stem maggot was reported from Phelps County about the middle of June.

GREEN BUG (Toxoptera graminum Rond.)

Minnesota F. H. Wadley (June 16): The green bug became very scarce after last summer's outbreak, owing to enemies, food scarcity, and unfavorable weather. It continued to decrease through the fall, though still existing in spots. No eggs were found, and no green bugs are now present in spots where they were living last

fall. None have been found this spring in any situation. Experiments show that wintering here by live aphids would be impossible, and by eggs unlikely.

FLAINS FALSE WIREWORM (Eleodes opaca Say)

Kansas

J. W. McColloch (June 20): Adults of the false wireworm were found very abundant in the wheat fields at Hays on June 8. Beetles were also reported abundant at Ulysses on May 25.

ARMY CUTWORM (Chorizagrotis auxiliaris Grote)

Nebraska

H. H. Swenk (April 25-May 25): As was briefly reported last month, the army cutworm was responsible for serious damage to winter wheat and alfalfa during the period covered by that report (March 15-April 25). The complaints of such injury came from an area extending from Dawes, Perkins, and Furnas Counties on the west to Antelope and Buckholts Counties on the east, the westernmost complaints being mostly of injury to winter wheat, while those from the more southern and eastern localities were of injury to alfalfa, especially to young alfalfa that was seeded last fall. Along with the larger, more nearly matured army cutworms, there occurred also large numbers of younger cutworms, half-grown or less, of the dark-sided cutworm (Euxoa messoria). During the month of May these dark-sided cutworms continued their development on the alfalfa, and with these and two species of Euxoa, injury in the alfalfa fields has been continuous from early April (8) to the fourth week in May (22). The younger and weaker fields seeded last fall have been injured, many of them having been destroyed, but in many cases larger and older fields have also been more or less stripped of their leaves. The center of this injury is in the area enclosed by Antelope, Greeley, and Madison Counties, but it extends west to Cherry County and south to Herrick and Hall Counties. Together, hundreds of acres of alfalfa have been injured by these cutworms during the period covered by this report.

Nebraska

H. H. Swenk (May 25-June 25): As a result of the outbreak of the army cutworm, Euxoa auxiliaris, during the last half of March and the month of April, fairly heavy flights of the adult moths appeared about the first of June over the infested area, and eastward over the State.

Montana

M. B. Habee (June 17): There has been a very general infestation by this insect practically clear across central Montana. There has been very little actual damage as the crops were late and the cutworms began pupating before much damage could be done; however, in one place near Hardin one 300-acre field of flax was eaten off, and a 500-acre field of winter wheat was seriously injured. The flax, however, is sending up new shoots and will probably not be a total loss.

ARMYWORM (Cirphis unipuncta Haw.)

- Missouri L. Haseman (June 4): Local epidemics of the armyworm have been reported from Jackson and Scott Counties.
- Nebraska H. H. Swenk (May 25-June 25): The armyworm was reported on June 22 as having badly injured 30 acres of a field of winter wheat in Fillmore County. Owing to the abnormally cool character of the spring other reports of injury by the armyworm are expected during the next few weeks.

WHEAT-HEAD ARMYWORM (Neleucania albilinea Hübner.)

- Kansas J. W. McColloch (June 21): The wheat-head armyworm has caused considerable damage in many fields over the State. At Manhattan the worms have been heavily parasitised by Apanteles militaris. A few tachinids are now showing up. Counties in which infestation is found: Brown, Riley, Saline, Edwards, and Sedgwick.

WHEAT JOINT WORM (Harmolita tritici Fitch)

- Illinois W. P. Flint (June 20): S. C. Chandler reports the wheat joint worm less abundant in southern Illinois than it has been for several years.

WIREWORMS (Elateridae)

- Indiana J. J. Davis (June 2): Wireworms caused severe injury to wheat at Columbus April 23.

SMUT BEETLE (Phalacrus politus Melsh.)

- Kansas J. W. McColloch (June 15): Specimens of this beetle were received from Peabody with the information that they were very abundant in the beards of wheat affected with smut.

CORN

CORN EAR WORM (Heliothis obsoleta Fab.)

- South Carolina J. O. Pepper (May 28): The corn ear worm has been doing serious damage to early planted corn in Georgetown County.
- Mississippi R. W. Harned (June 22): Specimens of the corn ear worm or tomato fruit worm have been collected recently on corn at Indianola, Holly Springs, Prentiss, and Russell. Very serious damage by this insect to tomatoes was reported on two farms at Ocean Springs during the early part of June. A complaint in regard to injury by this species to tomatoe was received from Orange Grove on May 27.

SOUTHERN CORN STALK BORER (Diatraea zeacolella Dyar)

North
Carolina

J. N. Tenhet (June 21): Infestation at present is approximately 50 per cent of a 20-acre field. Damage at present impossible to estimate, but probably negligible. If severe winds occur, however, before corn is harvested, injury will be very severe.

STALK BORER (Papaipema nebris nitela Guen.)

Indiana

J. J. Davis (June 24): The stalk borer was first reported from Edinburg as attacking potatoes June 11. Since that date reports have been received from LaPorte, Burlington, Amo, Danville, Seymour, LaFayette, Brownsburg, Russiaville, New Ross, Indianapolis, and Crawfordville, where it has been reported as attacking corn. At Indianapolis notable damage to tomatoes was reported. Apparently this borer is rather widespread throughout the State. The lateness of the corn and small size of the borers at the present time indicate that considerable damage will result. This borer is becoming an annual pest and should emphasize the importance of better farm practices.

Illinois

W. P. Flint (June 20): The small larvae of this insect are being sent in from all parts of the State with reports that they are causing considerable damage to corn. All larvae received thus far have been less than one-third grown.

Kansas

J. W. McColloch (June 20): There has been a general outbreak of the stalk borer in Kansas this month. Injury to corn reported from Auburn, Moran, Jaysville, Manhattan, Wellington, Strawn, Udall, and Leavenworth. The worms are taking the corn in some fields. Ornamentals are infested at Newton and sweet potatoes at Kiowa.

Minnesota

C. E. Mickel (June 16): In one county in the southeastern part of the State there have been several reports on the injury to corn by a larva closely related to Papaipema nitela. The larva attacks the corn plant when 3 or 4 inches high, bores into the stalk, and works downward toward the roots of the plant.

LESSER CORN STALK BORER (Elasmopalpus lignosellus Zell.)

Mississippi

R. W. Harned (June 22): Serious damage by the lesser corn stalk borer has been reported from Jackson, Pearl River County, and from Newton, Monroe, and Lauderdale Counties. Corn is the principal crop injured, although in some instances serious damage was reported to cowpeas and sugarcane.

CUTWORMS (Noctuidae)

Nebraska

M. H. Swenk (May 25-June 25): During the present spring there has been more destruction of young corn by the several common species of cutworms that are frequently responsible for this sort of injury than during any spring since 1912. The protracted

subnormal temperatures have slowed up both the growth of the corn and of the cutworms so that the latter have continued their depredations throughout the period covered by this report. A very great amount of replanting has had to be done for this reason, this sometimes involving the greater part of large fields and undoubtedly aggregating many thousands of acres of corn in the State as a whole. The species that have been most prominent are Euxoa messoria, Feltia ducens, and Feltia venerabilis. Where fields of alfalfa were adjacent to corn there was a considerable migration of cutworms from the alfalfa to the corn during the first 10 days in June, since which time there have been no complaints of further cutworm injury in the alfalfa fields. Although injury by cutworms to young corn has been general throughout the State, apparently the most severe corn cutting by these pests has occurred in the northeastern section of the State, that is, the portion lying north of the 44th parallel and east of the 99th meridian.

Kansas J. W. McColloch (June 20): Injury to corn by cutworms has been reported as follows: Webber, May 28; Elling, June 2; Madison, June 6; all have replanted three times; Manhattan, June 7, has replanted once.

Arkansas J. K. Gibson (June 13): Overflow worms are eating corn planted after overflow. When the corn sprouts they eat it.

APPLE TWIG BORER (Amphicerus bicaudatus Say)

Nebraska H. H. Swenk (April 25-May 25): During the first week in May, specimens of corn stalks that showed heavy borings by Schistoceros hamatus were sent in from Douglas County. Some of the beetles were found in the burrowings. This is the first time we have ever found this common beetle burrowing in cornstalks.

SEED CORN MAGGOT (Eulemyia cilicrura Rond.)

Maryland E. K. Walrath (May 28): Several fields of corn will have to be replanted completely near Uniontown on account of this pest.

South Dakota H. C. Severin (June 1): Severe damage to corn by the seed corn maggot is reported from Carter, Artesian, Hayti, and Howard. The season is very cool and backward. (June 5): There is 30 per cent injury to some cornfields near Burke, Manchester, and Wolsey.

Nebraska H. H. Swenk (April 25-May 25): The seed corn maggot has been reported as seriously injurious to planted corn in certain parts of Merrick County during the month of May. (May 25-June 25): The seed corn maggot, under the influence of the cool, wet spring, continued to be injurious to recently planted sprouting corn, in the more western parts of the State during the first half of June. Some of these reports are from localities farther west than have

previously experienced attacks by this insect, these including instances of serious injury as far west as eastern Cherry County and western Hayes County.

Minnesota

C. E. Mickel (June 16): The seed corn maggot is causing considerable injury to planted corn in the southern and western parts of the State. A number of fields have had to be replanted and there are also scattering reports of injury by this insect to planted seed pieces of potatoes.

STINK BUGS (*Coreidae* and *Pentatomidae*)

Louisiana

Chas. E. Smith & Norman Allen (June 11): Of the stink bugs which attacked corn, Euschistus servus was the most numerous species, from 6 to 12 on a single tassel being common. Next came Leptoglossus phyllopus L., Nezara viridula L., Euschistus ictericus L., and Euschistus tristigmus Say var. pyrrhocerus H.-S., respectively. Up to this time their attack has been confined almost entirely to the tassels of the corn, some of which have been killed prematurely, apparently. However, a few were observed feeding on the stalks below, especially on or near the shank of the ear.

CORN LEAF APHID (Aphis maidis Fitch)

Mississippi

R. W. Harned (June 22): Aphis maidis on corn received from Yazoo City on May 27, and determined by A. L. Hamner.

LINED CORN BORER (Hadena fractilinea Grote)

New York

E. P. Felt (June 24): Injury by the lined corn borer was reported June 20 and 21 from localities in Oneida and Rensselaer Counties.

Ohio

T. H. Parks (June 22): This lined stalk borer was sent in from Jefferson County with the statement that it was causing considerable damage to young corn by boring in the heart of the stalk and causing it to die. Infested fields were in sod last year. Have not had serious damage from this borer in corn since 1919, though specimens were received in 1918 and 1921.

Minnesota

C. E. Mickel (June 24): The lined stalk borer has been causing injury to corn in the southeastern counties. The injury seems to be centered in Fairmont County, although reports have been received from a number of counties to the north and west. The loss is estimated to be about 10 to 15 per cent of the planting. The larvae at the present date are almost full-grown, and it is not expected the injury will continue much longer.

SPOTTED CUCUMBER BEETLE (Diabrotica duodecimpunctata Fab.)

Indiana

J. J. Davis (June 24): The twelve-spotted corn root worm beetle was reported feeding abundantly on young corn plants at Kitchel June 18.

WIREWORMS (Elateridae)

- Kansas J. W. McCulloch (June 15): Injury to corn has been reported from Madison, Eureka, and Scammon.
- Minnesota C. E. Mickel (June 16): Wireworms are causing some damage to planted corn in one county in the western part of the State.

A WIREWORM (Monocrepidius vespertinus Fab.)

- North Carolina J. H. Tenhet (June 23): Adults are now present in large numbers in leaf sheaths of corn. No damage to corn can be noticed. This is the adult of the wireworm seriously injuring tobacco in the eastern Carolina bright-tobacco section.

UPLAND CORN WIREWORM (Melanotus pilosus Blatch.)

- Nebraska H. H. Swenk (April 25-May 25): The upland wireworm was reported to be destroying the kernels of newly and early planted corn during the last few days in April, in Adams County, and also as doing much damage to fields of wheat in Sheridan County about the middle of May, by consuming the roots of the plants.

PLAINS FALSE WIREWORM (Eleodes opaca Say)

- Nebraska H. H. Swenk (May 25-June 25): An instance of injury to young corn by the plains false wireworm came to our notice from Saline County, near Wilbur during the last week in May.

A FALSE WIREWORM (Eleodes tricostata Say)

- Nebraska H. H. Swenk (May 25-June 25): During the second week in June the false wireworm Eleodes tricostata was found attacking young corn in Cherry County, this being the first time we have found this species doing serious damage to corn in this State.

IMBRICATED SNOUT BEETLE (Ericaerus imbricatus Say)

- Nebraska H. H. Swenk (May 25-June 25): On June 6 a correspondent in Hall County reported that an abundance of the imbricated snout beetle was present in his cornfield, and that the beetles were cutting off the young plants at the top of the ground as they came up, doing serious damage.

ALFALFA

PEA APHID (Illinoia pisi Kalt.)

- Nebraska H. H. Swenk (May 25-June 25): The pea aphid was quite plenti-

ful in alfalfa fields in southeastern Nebraska during the last few days in May and the early part of June, and in some cases young alfalfa, seeded last fall, was attacked sufficiently heavily to be destroyed.

Mississippi R. W. Harned (June 22): On vetch received from Meridian May 20. Identification by A. L. Hammer.

ALFALFA WEEVIL (Phytonomus posticus Gyll.)

Nevada G. G. Schweis (June 2): The season is three weeks later than normal because of the cold, rainy weather. Alfalfa shorter than usual for this season because of aphid injury and cold weather.

Utah K. Sakimura (June 5): The alfalfa weevil is very abundant in this district, especially in the northern part of Delta. The infestation extends widely and the most part of alfalfa fields are injured. The tops appear gray from a distance. In one instance 10 or more larvae were found on one stem. All larvae are vigorously eating leaves now. One-half of the number is full-grown size. The hay is not growing because of the delayed warm weather and exceptional abundance of weevils, and the crop will be reduced in a great degree. Weevils are more abundant than last year; all growers say that there is an exceptional abundance this season.

CLOVER LEAFHOPPER (Agallia sanguinolenta Prov.)

Nebraska M. H. Svenk (May 25-June 25): During the first two weeks in June the clover leafhopper and other species were present in injurious abundance in the alfalfa fields of Dawson and adjacent counties in central Nebraska.

A CRANE FLY (Tipulidae)

Indiana J. J. Davis (June 2): A rather interesting report of damage to alfalfa by crane fly larvae, Tipulidae, came from Goshen May 9. A number of fields were seriously damaged. The field in which the greatest amount of damage occurred has been in alfalfa continuously for six years. There was also considerable blue grass scattered in the field. In this field from 2 to 3 acres were completely destroyed and more or less damage was done all over the field of 12 acres. Last year this farmer experienced similar injury and plowed up about 2 acres where damage was greatest. Larvae were found in large numbers about the crown of the plant and the roots, both being girdled. The plants that had been killed for some time could be pulled out of the ground easily.

CLOVER

PEA APHID (Illinoia pisi Kalt.)

- Illinois. W. P. Flint (June 20): The pea aphid is abundant on clover throughout central and southern Illinois, but is not causing any damage.
- Missouri A. C. Burrill (May 31): A scattering few of Macrosiphum pisi now appear on leaves of red clover in blossom, but aphids have left the rose and elder tree.

CLOVER LEAF WEEVIL (Hyoperia punctata Fab.)

- Indiana J. J. Davis (June 2): The clover leaf weevil, Hyoperia punctata, reported damaging sweet clover at Saratoga and Portland May 19 and 20 respectively.

CLOVER BUD WEEVIL (Phytonomus nigrirostris Fab.)

- Illinois W. P. Flint (June 20): J. H. Bigger reports adults of the clover bud weevil emerging in large numbers during the week of June 13.

FRUIT INSECTS

GENERAL

APHIDIDAE

New York

E. P. Felt (June 24): Various plant lice have been abundant during the past two weeks on elms, maples, and lindens and the rosy aphid somewhat numerous upon apple trees in various sections of the State. The woolly elm leaf aphid has also been abundant in some localities. Plant lice are very numerous on tea and hybrid perpetual roses at Rochester and other species upon a number of trees and shrubs (R. E. Horsey).

Indiana

J. J. Davis (June 2): Apple aphids have not shown up very abundantly. At Bedford, April 10, stem mothers and a few young of Aphis avenae were present on almost every cluster and likewise with every aphid colony was an egg or larva of a syrphid, Syrphus americana. When the same orchard was visited again, May 2 and again May 20, the aphids of this species were practically eliminated. On April 10 in the same orchard a single stem mother of the rosy apple aphid was observed. On May 22 occasional clusters were to be found, and apparently the first winged form appeared that day. (June 24): Probably the most conspicuous outbreak of the month is the comeback by Aphididae. Aphids are exceedingly abundant everywhere and on everything. The rosy apple aphid is spotted according to our observations, but the green apple aphid occurs in large numbers. They are especially destructive to young trees and small trees which were top-worked following the severe blight damage last year. Cherry is also heavily infested with the black cherry aphid. Shade trees of many kinds are infested and include linden, boxelder, and maples.

Missouri

A. C. Burrill (May 31): The brown aphid on grapevines is epidemic, just as the brown plum aphid, previously reported, continues in quite serious epidemic, also some black aphid on shepherd's-purse. (June 10): Syrphids and lady beetles are not attacking plant lice generally.

APPLE

APPLE APHID (Aphis pomi DeG.)

Connecticut

M. P. Zappe (June 22): Coccinellid larvae and syrphid larvae are not present in sufficient numbers to hold aphids in check. It is early in the season and not very many aphids are present but they have been increasing rapidly in the last few weeks.

Illinois

W. P. Flint (June 20): The green apple aphid is quite abundant in the southern and central sections of the State. It is causing some damage to nurseries.

ROSY APPLE APHID (Anuraphis roseus Baker)

Connecticut

M. P. Zappe (June, 1927): These have increased rather fast since early spring. More abundant than usual with coccinellids and syrphid parasites present.

WOOLLY APPLE APHID (Eriosoma lanigerum Hausm.)

Indiana

J. J. Davis (June 24): The woolly apple aphid is very abundant in orchards of southern Indiana. This is especially noticeable in breaks and cuts on the branches of small trees where injured earlier in the season by hail.

CODLING MOTH (Carpocapsa pomonella L.)

Ohio

E. W. Mendenhall (June 17): Codling moth adults are emerging in large numbers at Columbus. The arsenate of lead spray should be put on now.

Indiana

J. J. Davis (June 2): The codling moth situation is again serious. Winter mortality was apparently negligible. First moths were observed at Bedford May 2. L. F. Steiner observed the first eggs at Bedford May 9, but none hatched until May 21, owing to cool rainy weather. B. A. Porter observed first larvae at Vincennes, May 20.

The freeze destroyed a large percentage of the apples in southern Indiana and many orchardists are neglecting their regular sprays. It is a question, therefore, whether the scarcity of fruit will materially lessen the codling moth menace for the next year. (June 24): The codling moth situation is serious in southern Indiana. Emergence extended over a long period because of cool weather and as a result there will be no distinct period between hatching of first-brood worms and those of the second brood.

Illinois

W. P. Flint (June 20): Adults of the overwintering brood of the codling moth have practically ceased to emerge in southern and central Illinois. Emergence took place over a long period and comparatively few eggs were laid owing to the cool nights. Up to June 10 it was very difficult to find apples showing entrances. Mr. Chandler took the first larvae under bands in southern Illinois during the week of June 13. Most commercial orchards are very free from injury by this insect up to this date.

Missouri

A. C. Burrill (June 21): There seems to be little codling moth noted in this river valley section.

Kansas

R. L. Parker (June 20): About 50 per cent mortality over winter in the orchard region near Troy. Better control is expected this year since the weather is not so dry and hot. This pest wintered over very successfully about Wichita. It emerged with slight mortality. At Belle Plaine south of here it is a continuous round of spraying to partially control this insect.

- Montana W. B. Mabee (June 17): On June 3 overwintering larvae and some pupae were found in the orchard home section near Missoula. Living specimens were considerably easier to find than usual at this season.
- Washington E. J. Newcomer (June 1): First adults of the codling moth were observed May 4. Continued cool weather during the latter half of May has prevented oviposition, and this, together with some winter mortality, should make the codling moth a less serious pest in the Pacific Northwest this year than for several years past. Unfavorable weather has made it difficult for growers to apply the calyx spray at the right time. The first favorable weather for oviposition of any consequence occurred May 31 and June 1.

APPLE AND THORN SKELETONIZER (Hemerophila pariana Clerck)

- Maine J. V. Schaffner Jr. (June 31): A collection of larvae of the apple and thorn skeletonizer was sent in June 20 from Glenburn, by Quarantine Inspector A. C. Ward. He reports that they are plentiful on apple in this locality.

EASTERN TENT CATERPILLAR (Malacosoma americana Fab.)

- New England States J. V. Schaffner Jr. (June 17): Forty-eight reports received from various localities throughout New England seem to indicate that the infestations are spotty. Have noticed in some of the towns in eastern Massachusetts heavy infestations in one part of the town and very light in other parts.
- Connecticut M. P. Zappe (June): Many larvae show tachinid eggs. Many larvae also dying of wilt disease.
- Massachusetts A. I. Bourne (June 20): The apple tent caterpillar has been about as abundant as last year. No appreciable increase in abundance has been reported from any section. If anything, there has been a slight decrease in their numbers. At the time of our April report, I gave some preliminary figures relative to parasitism. Since that time we have drawn deductions of counts from about 13,000 eggs of this insect and found that the average parasitism for this number was 7.22 per cent. The egg masses showed an average hatch of between 85 and 86 per cent. The amount of parasitism was found to vary considerably according to egg masses, ranging from 0 up to 27 or 28 per cent. From the average percentage of parasitism, however, it would not appear that we could depend on the natural enemies of this insect to reduce it materially by the next season. The larvae had, by early June, for the most part, completed feeding and had begun to crawl about. The first cocoons were noted about the 12th to 14th.
- New York E. P. Felt (June 24): The apple tent caterpillar, Malacosoma americana, is reported as numerous throughout Monroe County, completely stripped trees being seen (Wm. L. G. Edson). This insect is apparently more common than ever in this section (R. E. Horsey).

New Jersey

D.W. Webb (April 17): Small damage to wild cherry at Pennington and Lawrenceville in Mercer County. First noticed on April 17.

C. J. Grant (May 12): Slight damage to apple and wild cherry at Middlebush.

TENT CATERPILLAR (Malacosoma sp. (pluvialis Dyar ?)

Oregon

H. Sargent (June 7): I have just collected a small nest of a rather common species of tent caterpillar in the apple orchard on the Patton and Brown ranch, which lies just west of the Lewis and Clark River and north of Fort Clatsop. I noticed quite a number of caterpillars of this kind in the orchard. This insect is now gregariously defoliating the apple trees.

APPLE LEAFHOPPER (Empoasca mali LeB.)

Massachusetts

A. I. Bourne (June 20): Apple leafhoppers have been reported, particularly from Connecticut Valley orchards, as decidedly more abundant than during the last two or three years. They proved especially troublesome in those orchards where growers for some reason or other had neglected to include nicotine in the calyx spray. Where nicotine was used, although the insects had made considerable start, they had been satisfactorily controlled.

Indiana

J. J. Davis (June 24): Leafhoppers, Empoasca mali, have been severe on apple this season, and in some cases have done more damage than the green apple aphid.

PLUM CURCULIO (Conotrachelus nemophar Hbst.)

Massachusetts

A. I. Bourne (June 20): Mr. Whitcomb reported the first collection of beetles, in his jarring experiments, on May 17. The numbers collected at that time indicated that the pest would be more abundant than in 1926. A later report from him, under date of June 15, states that the insect is unusually abundant this season and that many growers are reporting to him 50 to 60 per cent of their apples stung. I may say here that this report is borne out by our own observations in the western part of the State. Mr. Whitcomb reported collecting several specimens of apple curculio in his nets when jarring for the plum curculio.

APPLE CURCULIO (Tachyoterellus quadrisignatus Say)

Kansas

R. L. Parker (June 20): This insect causes a heavy June drop and later in the summer causes the ripe apples to assume a pepperbox appearance. The ordinary codling moth spray does not control the insect.

CYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

New York

E. P. Felt (June 24): Young scales were crawling at Rochester on warm, sunny slopes June 11, though not until four or five days later in cooler localities. There is a considerable amount of this scale on ash trees (R. L. Horsey).

PEAR PSYLLA (Psyllia pyri L.)

Massachusetts

A. I. Bourne (June 20): Because of the cold and stormy weather the egg-laying period was unusually long drawn out, so that at the time the lime-sulphur application at the cluster-bud stage was made, many of the adult psyllas had not completed their egg laying. As a result, the control which growers were able to secure by this application was much lower than usual, so that the pear psylla at the present is considerably more abundant than it has been for the last few years.

PEACH

ORIENTAL PEACH MOTH(Laspeyresia molesta Busck)

Connecticut

Philip Gorman (June 24): About the same infestation as occurred last year as well as can be judged by the amount of twig infestation.

West Virginia

L. M. Peairs (June 15): I have peach material infested with or showing the work of the oriental peach moth from three places near Morgantown and from Marion County, near Fairmont.

Georgia

O. I. Snapp (June 7): Oriental peach moth larvae in peach twigs were sent to the Laboratory from the orchard of J. L. Betts, Woodbury, Meriwether County. This is the first record that we have of the oriental peach moth in a west-central county of the State.

Ohio

E. W. Mendenhall (June 25): The oriental fruit moth is quite plentiful in Columbus and vicinity. Very little is being done as yet for its control.

PEACH BORER (Aegeria exitiosa Say)

Indiana

J. F. Davis (June 2): The peach-tree borer is abundant in orchards where no treatment was made last fall. Many orchards are therefore well infested since conditions last fall were unfavorable for the paradichlorobenzene treatment. (June 24) Many peach orchards which did not receive the paradichlorobenzene last fall are heavily infested now.

Nebraska

M. H. Swenk (April 25 - May 25): Reported as damaging peach trees near Superior, Nuckolls County, during the last week in April.

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Texas

F. C. Bishopp (June 25): The plum curculio has caused considerable loss this spring by attacking both plums and peaches. In some instances about 15 per cent of the fruit has been infested.

North Carolina R. W. Leiby (June 16): The first beetle of the first generation emerged at the Aberdeem laboratory June 12. The curculio has been more destructive thus far this season than for the last two years, owing possibly to mild winter and lax control methods being practiced by our commercial growers because of low prices.

Georgia O. I. Snapp (June 19): Second-generation larvae were noted in the peach orchards today. The Hiley crop escaped second-generation curculio attack this year, but Georgia Belles and Elbertas will be subjected to the second brood.

TARNISHED PLANT BUG (Lygus pratensis L.)

Indiana J. J. Davis (June 24): The tarnished plant bug is abundant, and it and possibly other plant bugs have been responsible for considerable damage known as "cat-facing" to peaches in southern Indiana.

CHERRY

UGLY NEST CHERRY WORM (Archips cerasivorana Fitch)

New York E. F. Felt (June 24): Nests of this species enveloping choke cherries occur here and there in southern Washington County.

PLUM

RUSTY PLUM APHID (Hysteroneura setariae Thos.)

Missouri A. C. Burrill (June 7): The plum aphid epidemic continues to increase.

EARLY PLUM APHID (Hyalopterus arundinis Fab.)

Connecticut W. F. Zappe (June, 1927): Only European plums have heavy infestation. Japanese varieties are practically immune.

RASPBERRY

RASPBERRY SAWFLY (Monophadnoides rubi Harris)

Connecticut R. B. Friend (June 15): A small plot of raspberries defoliated.

BLACKBERRY

AN APHID (Cerosipha rubifolii Thos.)

Missouri A. C. Burrill (May 20): The aphid is greenish, curling the leaves, and being tended by the trail ant (Crematogaster lineolata Say) and is being slain by syrphid larvae.

GRAPE

GRAPE LEAFHOPPER (Erythroneura comes Say)

Nebraska

M. E. Srenk (May 25 - June 25): The first report of injury by the grape leafhopper was received from Cedar County during the first week in June.

Texas

F. C. Bishopp (June 25): Leafhopper injury began to be evident early in June and increased considerably through the month, though it is probably not so bad as normal for this time of the year.

GRAPE LEAF FOLDER (Desmia funeralis Hübn.)

Texas

F. C. Bishopp (June 25): The first brood of this insect has done only minor damage to grapes in the vicinity of Dallas. Although some parasitism was observed, it is probable that subsequent generations will cause considerable injury to grapes.

CURRENT

CURRENT APHID (Myzus ribis L.)

Ohio

E. W. Mendenhall (June 1): Currant plants are affected as usual with the currant aphid south of Columbus, causing them to curl with bladderlike galls on the leaves.

NATIVE CURRENT WORM (Gymnonychus appendiculatus Hartig)

Ohio

E. W. Mendenhall (June 1): The first generation of the larvae have appeared south of Columbus on currants. The use of dusted or sprayed hellebore is safe and effective.

PECAN

THE WALNUT CATERPILLAR (Datana integerrima G. & R.)

Mississippi

R. W. Harned (June 22): The walnut caterpillar has been received recently from Ocean Springs, Tupelo, Senatobia, Buena Vista, and Shelby, where it was infesting pecan trees. These insects are also abundant on walnut and pecan trees on the college campus A. & M. College

PECAN BUD-MOTH (Proteopteryx bolliana Sling.)

Mississippi

R. W. Harned (June 22): Specimens of the pecan bud-moth have been received recently from Pascagoula, Clarksdale, Batesville, and McComb.

TRUCK - CROP INSECTS

MISCELLANEOUS FEEDERS

CUTWORMS (Noctuidae)

- Massachusetts A. I. Bourne (June 20): Cutworms have been fully as abundant as they were last year, attacking practically all garden crops. Owing to the cold weather which prevailed during our early spring, their work has caused considerable alarm, although it is subsiding.
- Indiana J. J. Davis (June 2): The variegated cutworm, Peridroma margaritosa, was observed defoliating tomato plants and eating heads of cauliflower in an Indianapolis greenhouse. These crops were following lettuce and at the time of observation (May 16) the cutworms were nearly full-grown. Apparently cutworms are not so destructive out of doors as a year ago. (June 24): Cutworms were generally troublesome early in the month in vegetable gardens at Elkhart.
- North Carolina C. H. Brannon (June 1): Cutworms are causing serious damage to beans in commercial areas in Wayne County.
- Minnesota C. E. Mickel (June 16): There has been some report of injury by cutworms throughout the State during the last month, but the injury is not so severe as in previous years.
- Nebraska M. H. Swenk (April 25-May 25): Cutworms of various species are doing more than the usual amount of damage in gardens this spring.

TURNIP BUG (Turnip Bug (Plutella histrionica Fahn))

- Mississippi R. W. Harned (June 22): Complaints accompanied by specimens of the insects have been received from Belmont, Union, Ellisville, and Shuqualak. Turnip and cabbage seem to be the principal crops injured, although in one case the correspondent stated: "They have almost ruined my garden."
- Texas E. C. Bishopp (April 16): These bugs have been causing considerable loss to garden owners in the vicinity of Menard.

LEAF-FOOTED BUG (Leptoglossus phyllopus L.)

- Mississippi R. W. Harned (June 22): Specimens of the leaf-footed bug were collected on artichokes at Natchez, on Irish potato at Ellisville, on May 26, and on squash and cucumbers at Utica on June 8.

IMBRICATED SNOUT BEETLE (Epicaerus imbricatus Say)

- Nebraska M. H. Swenk (April 25-May 25): On May 24, a correspondent in Buffalo County reported the imbricated snout beetle as injuring the beans, onions, and potatoes on his farm.

GARDEN SPRINGTAIL (Sminthurus hortensis Fitch)

Connecticut

R. B. Friend (June 21): There has been more or less damage to cotyledons of all plants, including melons, squash, and cucumbers, near Hamden. There is a greater number than last year.

POTATO AND TOMATO

POTATO FLEA BEETLE (Epitrix cucumeris Harr.)

Indiana

J. J. Davis (June 24): The potato flea beetle was reported abundant at Nappanee June 22.

Minnesota

C. E. Mickel (June 24): Flea beetles have been more abundant than usual this spring, injury having been reported on tomato and potato.

COLORADO POTATO BEETLE (Leptinotarsa decemlineata Say)

Alabama

H. B. Johnson (May): The Colorado potato beetle began to be serious about May 1, but was checked by applying a cornmeal and Paris green mash.

Nebraska

H. H. Swenk (May 25-June 25): Indications are that the Colorado potato beetle is more plentiful than usual in the extensive potato growing districts of northwestern Nebraska this spring, and that this will be a year when spraying operations will need to be resorted to in that portion of the State.

Montana

H. B. Mabey (June 17): Potato bugs are being observed in the fields.

POTATO APHID (Illinoia solanifolii Ashm.)

Ohio

T. H. Parks (June 22): The pink and green potato aphid has become very abundant and is threatening the crop of tomatoes on the grounds of the State Hospital at Columbus. It is also becoming abundant on potatoes in the vicinity of Columbus.

LEAFHOPPER (Empoasca fabae Harris)

North
Carolina

Z. P. Metcalf (June 1): Hopperburn is very serious on early Irish potatoes in the district of Pasquotank this year.

APPLE LEAFHOPPER (Empoasca mali LeB.)

Indiana

J. J. Davis (June 24): The potato leafhopper was reported damaging potatoes at Berne June 21.

TARNISHED PLANT BUG (Lygus pratensis L.)

Kansas J. W. McCulloch (June 1): This insect has caused serious damage to potatoes at Junction City.

STALK BORER (Papaipema nebris nitela Guen.)

Indiana J. J. Davis (June 2): The common stalk borer was first reported this year from Worthington, June 10, where it had already destroyed one-fifth of the recently set tomato plants in a commercial field.

Nebraska M. H. Swenk (May 25-June 25): The first cases of complaint of injury by the stalk borer were received during the second week in June from southeastern Nebraska, these relating chiefly to attacks on potato and tomato plants.

SUCKFLY (Dicyphus minimus Uhl.)

Mississippi R. W. Harned (June 22): R. P. Colmer, inspector for the State Plant Board, Moss Point, reported the first appearance of the tomato suckfly, Dicyphus minimus Uhl., on June 13. Slight damage was noted to tomato plants at Moss Point.

BLISTER BEETLES (Meloidae)

Kansas J. W. McCulloch (June 20): Reports of injury to potatoes have been reported from Long Island June 11 and Bogue June 17.

Mississippi R. W. Harned (June 22): Serious damage to Irish potatoes by Epicauta lemniscata was reported from Ellisville.

GRAY BLISTER BEETLE (Epicauta cinerea Forst.)

South Carolina J. O. Pepper (June 13): Gray blister beetles have been reported as destroying tomato plants in the area around Westminster of Oconee County.

Mississippi R. W. Harned (June 22): Serious damage to Irish potatoes by this blister beetle, at Hatcher, and to beans at Brooksville, was reported.

ASH-GRAY BLISTER BEETLE (Macrobasis unicolor Kirby)

Mississippi R. W. Harned (June 22): Serious damage by Macrobasis unicolor to Irish potatoes was reported from Smithville.

STINK BUGS (Coreidae and Pentatomidae)

Louisiana Chas E. Smith & Norman Allen (June 1): Considerable damage to the fruits of tomato were observed in three fields in the vicinity

of Baton Rouge. This damage was being done largely by three species. The leaf-footed plant bug, Leptoglossus phyllopus L., was the principal offender, while Euschistus servus Say and Nezara viridula L. were present in injurious numbers.

NEGRO BUG (Thyreocoris pulicarius Germ.)

Mississippi R. W. Harned (June 22): Negro bugs have been received from Ellisville, Independence, and Winona, where they were reported as injuring Irish potato plants.

CABBAGE

CABBAGE MAGGOT (Hylemyia brassicae Bouche)

Massachusetts A. I. Bourne (June 20): Cabbage maggots were reported by Mr. Whitcomb of the market garden district in Middlesex County as about average abundance, and their appearance was just about normal. A report from Bristol County, however, from a region around Dighton, showed the first eggs fully two weeks earlier than in 1926, and somewhat earlier than is normal for this species.

Maryland W. C. Rohde (May 27): Ehobia brassicae is causing considerable loss and necessitating much replanting.

CABBAGE APHID (Brevicoryne brassicae L.)

Indiana J. J. Davis (June 24): The cabbage aphid was abundant and damaging cabbage at Terre Haute June 8.

STRAWBERRY

STRAWBERRY LEAF ROLLER (Ancylis comptana Frohl.)

Kansas J. W. McColloch (June 1): A report of injury to strawberry by Ancylis comptana has been received from Canton.

STRAWBERRY ROOT WORM (Paria canella Fab.)

Alabama M. B. Johnson (May): In a strawberry bed of 150 plants which were set out this year in the vicinity of Birmingham, several plants shriveled and died. An investigation revealed the work of the strawberry root borer.

STRAWBERRY ROOT WEEVIL (Brachyrhinus ovatus L.)

Montana W. B. Mabey (June 17): The strawberry root weevil at this season appears to be no more abundant than usual.

WAVY-STRIPED FLEA BEETLE (Phyllotreta sinuata Steph.)

Indiana J. J. Davis (June 24): Reported June 20 as damaging strawberry at Marion.

STRAWBERRY SLUGS (Empria fragariae Rohwer)
(Empria maculata Norton)

Nebraska

M. H. Swenk (May 25-June 25): Strawberry slugs were more than usually troublesome during the period covered by this report. The early strawberry slug, Empria fragariae, began to be much complained of during the last few days in May, reports being received from all parts of eastern Nebraska. These injuries were followed by those of the late strawberry slug, Empria maculata Norton, which species is still active in the strawberry beds at the time of making this report.

Myriapoda

Indiana

J. J. Davis (June 2): Thousand-legged worms were reported from Princeton, May 18, eating into the fruits of strawberry and causing appreciable loss.

ASPARAGUS

ASPARAGUS BEETLE (Crioceris asparagi L.)

Massachusetts

A. I. Bourne (June 20): Asparagus beetles of both species appeared in approximately normal abundance.

Maryland

F. D. Sanders (May 4): Crioceris asparagi L. was reported as attacking asparagus at Henderson.

BEANS

SEED CORN MAGGOT (Hylemyia cilicrura Rond.)

Montana

W. B. Habee (June 21): The seed corn maggot is doing damage to germinating beans at Hardin.

BEAN APHID (Aphis rumicis L.)

Nebraska

M. H. Swenk (May 25-June 25): The bean aphid has been very plentiful during the past two weeks.

LEMA BEAN VINE BORER (Monoptilota pergratialis Hbst.)

Mississippi

R. W. Harned (June 22): Specimens of the lima bean vine borer, Monoptilota nubilella, have been received from Meridian, where they were reported as injuring beans May 26.

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

North
Carolina

R. W. Leiby (June 8): More complaints of injuries than usual are being received. The first authentic date of their appearance was May 27. Complaints are coming mainly from the northern

Piedmont section. Forty-six westernmost counties of the State are now infested.

South Carolina C. O. Eddy (June 20): Spring emergence of hibernating beetles about over. Damage bad locally throughout the Piedmont section. Infestation not general yet.

Indiana J. J. Davis (June 24): The Mexican bean beetle is very abundant and destructive in the southeastern Quarter of the State.

Alabama F. B. Johnson (May 24-25): In my garden in Birmingham vicinity the Mexican bean beetle was found seriously injuring young bean leaves. All stages of the beetle were prevalent.

BANDED CUCUMBER BEETLE (Diabrotica balteata Lec.)
BEAN LEAF BEETLE (Cerotoma trifurcata Foerst.)

Mississippi K. L. Cockerham (June 13): Both species were found attacking beans in such numbers as to necessitate dusting for their control. The leaves showed considerable damage, and the beetles flew out in considerable numbers when the plants were disturbed.

CUCUMBERS AND MELONS

COTTON APHID (Aphis gossypii Glou.)

Mississippi R. W. Harned (June 22): Aphis gossypii on cucumber at Creole and Moss Point was reported June 1.

SEED CORN MAGGOT (Hyalemyia cilicrura Rond.)

Indiana J. J. Davis (June 24): Larvae supposed to be the seed corn maggot were reported damaging planted cucumber seed at Plymouth June 13.

SQUASH BUG (Anasa tristis DeG.)

Georgia O. I. Snapp (June 14): Squash bugs have been unusually abundant this year. They are now attacking cucumbers and watermelons. Considerable damage to the Georgia watermelon crop has resulted this year from squash bug attacks. Early squash was also very heavily infested.

Mississippi R. W. Harned (June 22): Complaints of injury accompanied by specimens have been received from Sapa and Dekalb, in regard to the common squash bug on watermelon vines.

STRIPED CUCUMBER BEETLE (Diabrotica vittata Fab.)

Mississippi K. L. Cockerham (June 15): Cucumbers and canteloupes were attacked by this insect and showed rather severe injury. The plants were dusted for the control of the beetles.

Kansas

J. W. McColloch (June 20): The striped cucumber beetle has been very prevalent this year on melons and cucumber in the counties of Graham, Jewell, Ellsworth, Republic, Lyon, Johnson, and Crawford.

SPOTTED CUCUMBER BEETLE (Diabrotica duodecimpunctata Fab.)

Kansas

J. W. McColloch (June 22): On June 6 the beetles were reported injuring melons at Tanganoxie, and on June 14 injuring cantaloupes at Spring Hill.

SQUASH

SQUASH BORER (Melittia satyriniformis Hübner.)

Mississippi
and
Alabama

K. L. Cockerham (June 17): Melittia satyriniformis continues to be one of the most serious of truck-crop pests this spring. It has been found injuring squash in Lincoln, Pearl River, Hancock, Harrison, and Jackson Counties, Miss., and Mobile County, Ala. While squash is not, perhaps, our principal crop, yet some are found in every garden. Many cases run around 100 per cent infestation.

ONIONS

ONION MAGGOT (Hylemyia antiqua Meig.)

Indiana

J. J. Davis (June 24): The onion maggot has been reported as damaging onions the past month from Elkhart and Ashley.

BEETS

STRIPED BLISTER BEETLE (Epicauta vittata Fab.)

South
Carolina

J. O. Pepper (May 26): Specimens of this insect were received from Awenden in Georgetown County, and reported as seriously injuring the foliage of beets.

SWEET POTATO

TORTOISE BEETLES (Cassidinae)

South
Carolina

J. O. Pepper (May 30): Specimens of tortoise beetle larvae have been received from Woodruff and reported as damaging sweet-potato plants that had been transplanted.

Mississippi

R. W. Harned (June 22): The following tortoise shell beetles were reported as attacking sweet potatoes: Metritona bivittata Say June 2, at Kendrick; Chelymorpha cassidea Fab. May 27, at Yazoo City and A. & M. College; Jonthonota nigripes Oliv. June 2 at Kendrick.

BANDED CUCUMBER BEETLE (Diabrotica balteata Lec.)

Mississippi

K. L. Cockerham (June 18): Considerable numbers of these beetles are seen in fields of sweet potatoes and injury to the leaves can be noticed.

SWEET-POTATO FLEA BEETLE (Chaetocnema confinis Cr.)

Mississippi

R. W. Harned (June 22): Specimens of the sweet-potato flea beetle collected on sweet-potato plants have been received from Kendrick.

RHUBARB

RHUBARB CURCULIO (Lixus concavus Say)

Indiana

J. J. Davis (June 2): The rhubarb curculio was reported injuring rhubarb at Rochester and Spencerville the past month.

RADISH

CABBAGE MAGGOT(Hylemyia brassicae Bouche)

Indiana

J. J. Davis (June 24): The cabbage or radish maggot damaged radishes at Sheridan June 14.

FALSE CHINCH BUG (Nysius ericae Schill.)

Kansas

J. W. McColloch (June 5): Severe damage to radish and turnips reported from a truck garden at Hays.

PEPPER

TOMATO WORM (Protoparce sexta Johns.)

Louisiana

T. E. Holloway and W. E. Haley (May 25): Horn worms, probably Phlegethontius sexta, were found injuring pepper plants near New Orleans.

YELLOW-STRIPED ARMYWORM (Prodenia ornithogalli Guen.)

Louisiana

T. E. Holloway and W. E. Haley (May 25): The cotton cutworm, Prodenia ornithogalli, was found attacking pepper plants near New Orleans. Various larval stages up to last-instar larvae were present. As damage from cutworms is feared following the floods, in the Mississippi Valley, these records may be of interest. M. M. High identified Prodenia ornithogalli in its various stages.

BLACK CUTWORM(Agrotis ypsilon Rott.)

Louisiana T. E. Holloway and W. E. Haley (May 25): The greasy cutworm, Agrotis ypsilon, was found attacking pepper plants near New Orleans. Various stages up to last-instar larvae were present. As damage from cutworms is feared following the floods in the Mississippi Valley, these records may be of interest.

PEPPER WEEVIL (Anthonomus eugenii Cano.)

The

California R. E. Campbell (June 15): / pepper weevil in southern California is extremely late in appearing in the fields this year. Up to the present time practically no adult weevils have been observed in the plantings.

S O U T H E R N F I E L D - C R O P I N S E C T S

COTTON

BOLL WEEVIL (Anthonomus grandis Boh.)

B. R. Coad (Cooperative Report June 1): Comparing records this year with those of 1926, a greater survival will be noted this year at Florence, S. C., College Station, Texas, Aberdeen, F. C., Raymond, Miss., Rocky Mount, N. C., A. & M. College, Miss., Poplarville, Miss., and Holly Springs, Miss., while a greater survival was recorded in 1926 at Auburn, Ala., Baton Rouge, La., and Experiment, Ga.

- North Carolina R. W. Leiby (June 8): Winter survival has been unusually heavy according to winter cage records. J. A. Harris reports finding his first weevils in the field on cotton on June 6 in a locality where cotton shows tiny squares. (June 16): First punctured squares found by J. A. Harris June 14. First weevil taken on cotton on June 6, in Scotland County. On June 14, 3,865 plants in 10 fields averaged one weevil per 100 plants, the maximum being 5 weevils per 100 plants.
- South Carolina C. O. Eddy (June 20): No activities in the Piedmont section reported or observed.
- Mississippi R. W. Harned (June 22): High Weevil infestations are being reported in nearly all sections of the State except the Delta. During the week ending June 18, State Plant Board inspectors examined 146 farms in 40 counties, finding weevils on 97 of them. Several infestations of 15 per cent, 16 per cent, 17 per cent, and 20 per cent were found, in sharp contrast with $3\frac{1}{4}$ per cent, the highest infestation on the same date last year. General rains have fallen and showery weather is prevailing over most of the State. A high percentage of the first-generation weevils are reaching maturity and heavy infestations are expected during the next week or two.

FLEA HOPPER (Psallus seriatus Reut.)

- North Carolina R. W. Leiby (June 16): Noted by J. A. Harris as abundant in Red Spring to Laurinburg section and present in adjacent counties. Where cotton was squaring, blasted squares were commonly found June 14. Reported from Edgecombe County June 8 and from Cleveland County June 6.
- South Carolina C. O. Eddy (June 20): Cotton flea hopper on cotton in very small numbers. Abundant on evening primrose. Primrose is now maturing and cotton beginning to grow rapidly and cotton flea hoppers depositing some eggs on plants now.
- Mississippi R. W. Harned (June 22): Cotton flea hoppers are abundant on horsemint and croton and are present in some cotton fields. No injury has been observed to date.

COTTON LEAF WORM (Alabama arallacea Hübner.)

- Tennessee R. W. Harned (June 22): Specimens of what is believed to be the cotton leaf worm were received from Somerville, on June 16. They were almost full-grown and are being reared to maturity for definite determination.

COTTON APHID (gphis gossypii Glov.)

- South J. O. Pepper (May): Young cotton has been infested locally by this insect in the Piedmont section.

Mississippi R. W. Harned (June 22): On cotton at Indianola on June 9; and on cotton at Michigan City on June 18. The infestations at Michigan City seemed to be heavy enough to demand control measures. Identification by A.L. Hammer.

North

Carolina

R. W. Leiby (June 16): The cotton leaf louse is about as abundant as in average years.

A CHRYSOMELID (Luperodes sp.)

Mississippi

R. W. Harned (June 22): Insects identified by J. M. Langston as Luperodes sp. have been received from Jackson and Clinton. They were reported as damaging cotton.

THREE-CORNERED ALFALFA HOPPER (Stictocephala festina Say)

Mississippi

R. W. Harned (June 22): Specimens were collected on cotton at Lena on May 27.

THRIPS (Thysanura)

South

Carolina

C. O. Eddy (June 22): Thrips have been abundant on young cotton plants throughout the entire Piedmont section up to this time. Infestation now decreasing.

TOBACCO

TOBACCO FLEA BEETLE (Epitrix parvula Fab.)

Virginia

J. U. Gilmore (May 26): Epitrix parvula is damaging very seriously newly set tobacco and tomato plants.

WIREWORMS (Elateridae)

Virginia

J. U. Gilmore (May 28): Indications are that this will be the worst wireworm year of the past four.

WEBWORM (Crambus caliginosellus Clem.)

Virginia

J. U. Gilmore (May 28): Crambus caliginosellus is now causing heavy losses to tobacco set a week ago.

Florida

SOUTHERN GREEN STICK BUG (Nezara viridula L.)
F. S. Chamberlin (June 20): Adults of the southern green plant bug are rather numerous at the present time. A slight damage is being done to crops of tobacco.

TOBACCO THRIPS (Frankliniella fusca Hinds)

Florida

F. S. Chamberlin (June 6): The tobacco thrips has caused practically no damage in Gadsden County this season in spite of ex-

ceedingly dry weather. It is believed that the frequent applications of Paris green made during the early part of the growing season for flea beetle control exert a strong controlling influence over the tobacco thrips.

SUGARCANE

SUGARCANE BEETLE (Euetheola rugiceps Lec.)

Mississippi

R. W. Harned (June 22): Complaints accompanied by specimens of the insects continue to be received at this office in regard to the rough-headed cornstalk beetle or sugarcane beetle. Corn and sugarcane are the crops being injured in most cases, although in one or two instances cotton stalks have been attacked. One man reported that 75 per cent of his sugarcane had been injured by these beetles.

F O R E S T A N D S H A D E - T R E E I N S E C T S

MISCELLANEOUS FEEDERS

PERIODICAL CICADA (Tibicina septendecim L.)

West
Virginia

A. D. Hopkins (May 28): The periodical cicada is here (Kanawha Farms, Mineral Wells) in limited numbers. The only record we have for its appearance in West Virginia is for 1895 in Grant, Hardy, Pendleton, and Randolph Counties. It was predicted in my W. Va. Bulletin 68, p. 279 for 1910 in all of West Virginia counties bordering Virginia.

L. M. Peairs (June 15): I got some specimens from a hitherto unrecorded locality for this brood at Reedsville, Preston County. Mr. Rumsey later visited the locality and did not find any of the insects so it is apparent that they are scarce. There is no doubt about the occurrence, though, as I have two specimens.

WHITE-MARKED TUSSOCK MOTH (Hemerocampa leucostigma S. & A.)

New York

E. P. Felt (June 24): White-marked tussock moth caterpillars are just hatching in Buffalo and relatively few compared with earlier years (C. T. Clark, City Forester, June 15). This insect was reported as hatching at Rochester at the end of May and it has developed very slowly, partly owing to the cool weather and more likely to the early thorough spraying (R. E. Horsey).

Ohio

E. W. Mendenhall (June 2): The white-marked tussock moth began to show its work on the sycamore and elm trees along the streets in Springfield. The partly grown caterpillars can readily be destroyed by arsenical poisons.

T. H. Parks (June 22): The larvae are beginning to damage elms and other shade trees in Columbus. They are much more abundant this year and have required spraying to control.

Indiana

J. J. Davis (June 2): Tussock moth eggs are very abundant throughout central Indiana, and inasmuch as there has been an inappreciable winter mortality, considerable trouble from the caterpillars is anticipated. (June 24): Tussock moth caterpillars began hatching at La Fayette June 3. Reports of defoliation received from Greensburg, LaFayette, Terre Haute, and Logansport.

CANKER WORMS

Connecticut

M. P. Zappe (June 16): Cankerworms are attacking oak, maple, apple, etc. An oak grove near the town of Lyme almost defoliated. Calosoma scutator Fab. feeding on larvae, which are also dying of a wilt disease.

FALL CANKER WORM (Alsophila pometaria Harr.)

New England
States and
New Jersey

J. V. Schaffner Jr. (June 17): Seems to be very common in many localities in New England and New Jersey, though no serious defoliations have been reported.

Connecticut

W. E. Britton (June 13): Larvae now about full-grown at Westport and vicinity, on shade trees and fruit trees. It also appeared in one orchard at Mount Carmel (town of Hamden). Apparently none around Danbury.

Pennsylvania.

W. J. McGovern through T. L. Guyton (June 20): "I have been in the woods for more than 40 years, and while I have been familiar with them I never saw them in droves like they are at the present time. In the last three weeks I have been in the following counties: Clearfield, Clinton, Centre, Jefferson, and Clarion, and I find them everywhere." (Determination by A. B. Champlain).

Montana

W. B. Mabey (June 21): The fall canker worm is again this year starting to defoliate shelter belts in the neighborhood of Havre.

SPRING CANKER WORM (Paleocrita vernata Peck)

New York

E. P. Felt (June 24): Canker worms attacked elms, lindens, and hickory in Westchester County localities. There was partial defoliation and nearly complete stripping by this insect in stream-bottom growths, mostly elm, in southern Washington and northern Rensselaer Counties, serious injury being quite restricted.

FALL WEBWORM (Hyphantria cunea Drury)

Mississippi

R. W. Harned (June 22): The fall webworm has made its appearance in practically every section of the State.

Arkansas W. J. Baerg (June 16): The first eggs of Hyphantria cunea were found on shade trees at Fayetteville June 16.

EUONYMUS SCALE (Chionaspis euonymi Comst.)

New York E. P. Felt (June 24): The euonymus scale observed crawling on June 8, and in one section there is a serious infestation, the Euonymus on a large factory building being half dead and very unsightly (R. E. Horsey).

ARBORVITAE

LONG SPRUCE CONE GALL (Chermes cooleyi Gillette)

Ohio E. W. Mendenhall (May 31): Spruce gall aphids were quite numerous on Biota (Arborvitae), and were doing some damage, but whale-oil soap seemed to control them.

BEECH

WOOLLY BEECH LEAF APHID (Phyllaphis fagi L.)

New York E. P. Felt (June 24): The woolly beech leaf aphid is somewhat common at Rochester on a variegated European beech, but less abundant than usual (R. E. Horsey):

BIRCH

BIRCH LEAF MINER (Fenusa pumila Klug)

Massachusetts J. V. Schaffner Jr. (June 21): This leaf-mining sawfly is very abundant again this year on gray birch throughout eastern Mass.

BOXELDER

FOREST TENT CATERPILLAR (Malacosoma disstria Hübner)

Missouri A. C. Burrill (June 21): The first nest noticed on boxelder the past week is that of the forest caterpillar.

BOXELDER BUG (Leptocoris trivittatus Say)

Kansas J. W. McColloch (June 13): The boxelder bug is abundant on boxelder at Lacrosse and is also becoming a nuisance in houses.

CEDAR

BAGWORM (Thyridopteryx ephemeriformis Haw.)

Kansas J. W. McColloch (June 20): The only report of bagworms received this month came from Auburn where they were reported abundant on cedars.

ELM

WOOLLY APPLE APHID (Eriosoma lanigerum Hausm.)

Missouri A.C. Burrill (May 30): So numerous that the lower leaves show sticky spots of honeydew as if they had been sprayed. This is the usual leaf-curling species although I have not determined it by microscope.

WOOLLY ELM APHID (Eriosoma americana Riley)

Nebraska M. H. Swenk (May 25-June 25): The elm leaf curl produced by Schizoneura americana has been complained of throughout the State since the second week in June.

EUROPEAN ELM SCALE (Gossyparia spuria Modeer)

New York E. P. Felt (June 24): The elm bark louse is more abundant than usual though no young have been observed at Rochester (R. E. Horsey).

ELM LEAF BEETLE (Galerucella xanthomelaena Schrank)

New York E. P. Felt (June 24): The elm leaf beetle has not been reported at Rochester to date, which is rather unusual unless the insect is being retarded by cool weather (R. E. Horsey). This condition also obtains in Albany and vicinity.

ELM LEAF MINER (Kaliopfenusa ulmi ~~Sund.~~)

New York E. P. Felt (June 24): The elm leaf miner is rather abundant on eight elms on East Avenue, Rochester, and extremely abundant on some small trees in the environs of Troy.

ELM SCURFY SCALE (Chionaspis americana Johns.)

Nebraska M. H. Swenk (April 25-May 25): About the usual number of complaints relative to the white elm scale were received during the period covered by this report.

PUTNAM'S SCALE (Aspidiotus ancylus Putn.)

Nebraska M. H. Swenk (April 25-May 25): A report of a heavy infestation of an elm tree with Putnam's scale was received from Fillmore County.

HAWTHORN

HAWTHORN LEAF MINER (Profenusa collaris Mac G.)

New York E. P. Felt (June 24): Hawthorn leaf miner. A number of hawthorns are infested with this insect in both the Genesee Valley and Highland Parks, Rochester (R. E. Horsey).

HICKORY

(Phylloxera caryaefallax Riley)

Missouri A. C. Burrill (June 7): I enclose some new galls on shagbark hickory found south of Jefferson City. (Determined by F.W. Masch).

LARCH

LARCH CASE BEARER (Coleophora laricella Hübner.)

Maine, Vermont and Massachusetts J. V. Schaffner Jr. (June 17): Reported as very abundant in vicinity of Bangor, Croton, and Dover-Foxcroft, Maine, and Stockbridge, Mass. The feeding by these small larvae has caused the foliage to turn brown on the larch trees in localities named. (June 23): A report was received today that all larch in vicinity of Bristol, Vt., are badly browned.

New York E. P. Felt (June 24): Larch foliage very generally browned by the mines of the larch case bearer was reported from Rochester June 8, the material containing recently issued moths. The insect occurred upon several varieties of larch and had not been observed until the present season (R. E. Horsey).

WOOLLY LARCH APHID (Chermes strobilobius Kalt.)

New York E. P. Felt (June 24): The woolly larch aphid was quite abundant as usual on European and Japanese larch (R. E. Horsey).

LOCUST

LOCUST TWIG GALL (Ecdytoloba insiticiaria Zell.)

Missouri A. C. Burrill (May 31): Please find enclosed spray of locust tree with gall twigs of unknown gall insect, with molts, still attached to base of twig. The last three days adults have emerged (cast skins in exit hole sent herewith). (Determination by C. T. Greene.)

MAPLE

MAPLE CHAITOPHORUS (Periphyllus aceris L.)

Ohio T. H. Parks (June 22): These aphids are very abundant and causing the Norway maples to be covered with sticky secretion or honeydew. Have had complaints from Columbus, Cincinnati, Hamilton, Lebanon, and Springfield.

AN APHID (Drepanaphis acerifolii Thoms.)

Ohio E. W. Mendenhall (June 14): The maple aphid is very bad on the maple in Columbus and doing considerable damage to the leaves.

The leaves are dripping with honeydew. Nicotine sulphate is a control spray.

NORWAY MAPLE APHID (Periphyllus lyropicta Kessler)

- Ohio E. W. Mendenhall (June 1): Norway maple trees in Dayton are quite badly infested with Norway maple aphids.
- Indiana J. J. Davis (June 24): Hard and Norway maples have a heavy infestation of Periphyllus lyropicta and the upper surfaces of the leaves are heavily coated with honeydew. Reports of this species have been coming in since June 2, and definite inquiries have been received from the following counties: Johnson, Whitley, Wayne, Madison, Fountain, Cass, Grant, Howard, Hamilton, Marion, Rush, Delaware, Ripley, and Decatur. Shrubs such as nine-bark, spiraea, and Viburnum are heavily infested as are also various weeds and cultivated flowers.

GREEN FRUIT WORM (Xylina antennata Wlk.)

- Ohio E. W. Mendenhall (June 2): A slight infestation of the green maple worm was found at New Carlisle. Birds and parasites usually hold them in check.

COTTONY MAPLE SCALE (Fulvinarina innumerabilis Rathv.)

- Ohio E. W. Mendenhall (June 8): The cottony maple scale is beginning its activity this week on the soft maple trees in Columbus. They are quite abundant.
- Indiana J. J. Davis (June 2): The cottony maple scale continues as an important shade-tree pest in the northern half of the State. (June 24): The cottony maple scale has again shown up throughout the northern half of the State, especially central Indiana, in conspicuous and destructive abundance. Definite reports were received from the following counties: Decatur, Tipton, Boone, Henry, Wayne, Grant, Madison, Delaware, Fayette, Cass, Marion, Howard, Tippecanoe, Hendricks, Hamilton, Miami, Huntington, Rush, and Elkhart. To date eggs have not started to hatch at La Fayette.

GOUTY VEIN GALL (Dasyneura communis Felt)

- Missouri A. C. Burrill (June 7): I enclose sugar maple leaves with galls for determination. (Determined by C. T. Greene.)

ERIOPHYES GALLING (Eriophyes sp.)

- Missouri A. C. Burrill (May 18): This gall epidemic confined to the lower branches and leaves and differs from work of Eriophyes quadripes Shimer. There are 2 per cent of the leaves damaged. (Determined by H. E. Ewing who says "Eriophyes sp., probably undescribed. Mentioned in Felt's Bulletin, p. 164.")

OAK

FOREST TENT CATERPILLAR (Malacosoma disstria Hüb. ["])

Massachusetts J. V. Schaffner Jr. (June 17): Common this year in oak woodlands through eastern Massachusetts. No serious outbreaks reported.

HICKORY APHID (Longistigma carvae Harr.)

South J. O. Pepper (June 5): Giant hickory aphids are still present in
Carolina large numbers on water oak in the Piedmont section.

A LEAF MINER (Species undet.)

South J. O. Pepper (June 1): White oak leaves infested by a small moth
Carolina leaf-miner (species undetermined) have been received from Saluda County and reported as seriously injuring the foliage on a large white oak.

PIKE

A Correction

F. C. Craighead (June 15): The note on Dendroctonus valens in the June 1 issue of the Bulletin, p. 125 from the Monthly Letter of the Bureau of Entomology, No. 156, April, 1927, should have been under Dendroctonus frontalis Zimm.

SAWFLY (Tenthredinidae)

Louisiana (Monthly Letter of the Bureau of Entomology, No. 157, May, 1927):
O. T. Bilbray, of the Louisiana Department of Conservation, stationed at Many, reported an extensive outbreak of sawfly larvae on shortleaf pine this year. The larvae appeared in Sabine and Vernon Parishes about April 23, attacking more than 3,600 acres of young growth from 3 to 5 feet high. It was stated that the full-grown larvae are plentiful at this time, and suggestions were made for their control. These larvae were first reported as defoliating pines in June, 1926. Mr. Bilbray also reported the browning of foliage of apparently thrifty young pine trees by lepidopterous needle miners, extending over the same areas in these two parishes.

SPRUCE SAWFLY (Neodiprion abietis Harr.)

Massachusetts J. V. Schaffner Jr. (June 17): Larvae of a sawfly are unusually common on Pinus rigida (pitch pine) throughout eastern Mass. Many reports of its occurrence have been received the past few days. One collector found it damaging Pinus resinosa (red pine).

New York E. F. Felt (June 24): Injury by this insect to scrub pine was re-

ported from the Champlain Valley. Presumably this insect was reported as having defoliated an area about 12 miles square between Keesville and Plattsburg.

PINE LEAF MINER (Paralechia pinifoliella Chamb.)

Massachusetts J. V. Schaffner Jr. (June 23): This leaf miner is very abundant on Pinus rigida (pitch pine) through eastern Mass. The ends of the needles of last year's growth are badly mined which gives the trees a brownish appearance.

W. Middleton (June 24): When Dr. Craighead was in New Bedford, in the early part of June, he collected a needle miner in pitch pine. The insect was common and causing serious injury in that neighborhood. Mr. Heinrich identified it as Paralechia pinifoliella Chamb.

PINE LEAF SCALE (Chionaspis pinifoliae Fitch)

New York E. P. Felt (June 24): Young were crawling at Rochester June 11 though not nearly so numerous as in past years owing to persistent spraying. (R. E. Horsey.)

Nebraska H. H. Swenk (May 25-June 25): The usual number of complaints relative to the pine leaf scale were received during the period covered by this report.

POPLAR

POPLAR CURCULIO (Cryptorhynchus lapathi L.)

Indiana J. J. Davis (June 24): The mottled poplar borer was reported very destructive to poplar at Williamsport June 18.

YELLOW-SPOTTED WILLOW SLUG (Pteronus ventralis Say)

Ohio E. W. Mendenhall (June 2): Clusters of eggs of the yellow-spotted willow slug are quite numerous on poplar trees in the nursery at New Carlisle, but no noticeable damage yet.

SUMAC

SPIDER MITE GALL (Phyllocoptes toxicophagus [Mord.])

Missouri A. C. Burrill (June 14): Enclosed is a sample of spider mite gall work on wild aromatic sumac (Rhus canadensis), which looks just like what I have seen on poison ivy leaves. These were reddish when picked and are turning darker. (Determined by H. E. Ewing, who says, "Apparently a new variety of Phyllocoptes toxicophagus.")

SPRUCE

SPRUCE BUDWORM (Harmoloba fumiferana Clem.)

Ohio E. W. Mendenhall (May 31): The blue spruce in a nursery in Mt. Vernon badly infested with spruce budworm. Nicotine sulphate seems to be very valuable for treating the pest.

RED SPIDER (Tetranychus telarius L.)

Kansas J. W. McColloch (June 18): The red spider is causing severe damage to spruce at Leavenworth.

WALNUT

WALNUT CATERPILLAR (Datana integerrima G. & R.)

Arkansas W. J. Baerg (June 16): Caterpillars began hatching on June 11. Judging by the number of eggs found, injury by caterpillars will be quite severe.

WILLOW

POTATO FLEA BEETLE (Epitrix cucumeris Harr.)

Minnesota C. E. Mickel (June 24): One of the most severe cases of injury was in a field of willow cuttings planted by a nursery in the southern part of the State. This field contained several millions cuttings and a large percentage of the plants were almost entirely defoliated.

GREENHOUSE AND ORNAMENTAL PLANTS

MISCELLANEOUS FEEDERS.

APHIDIIDAE

Minnesota C. E. Mickel (June 16): Plant lice are just beginning to appear in some numbers and are attacking a variety of plants including plum, buckthorn, boxelder, rose, and snowball. (June 24): Aphids continue to be more and more abundant, especially on ornamental plants. At the present time we are receiving numerous reports regarding injury on buckthorn hedges and boxelder.

A BEETLE (Blepharida rhois Forst.)

Kansas R. L. Parker (June 20): Larvae are defoliating the plants. They are especially destructive to the smoketree (Rhus cotinus) used for ornamental planting.

ALTHAEA

A MEALYBUG (Pseudococcus maritimus Ehrh.)

Mississippi R. W. Harned (June 22): Mealybugs identified by Miss Gladys Hoke as Pseudococcus maritimus were collected on May 31 at Brookhaven. The host plant was althaea. This is the first time this species has been reported from Mississippi.

BOXWOOD

BOXWOOD LEAF MINER (Monarthropalpus buxi Labou.)

Connecticut W. E. Britton (June 13): The box leaf miner attacking box at Westport was reported by A. H. Kellner. Adults just beginning to emerge.

District of Columbia (Monthly Letter of the Bureau of Entomology, No. 157, May, 1927): Some of the specimen box bushes bordering the drive on the north side of the White House have been very heavily infested by the boxwood leaf miner, and Mr. Middleton, of this office, has been active in making recommendations and offering advice to Mr. Reeves, of the White House, in combating the insect.

CHRYSANTHEMUM

MARGUERITE FLY (Phytomyza chrysanthemi Kowarz.)

Mississippi R. W. Harned (June 22): Specimens of the marguerite fly were collected on chrysanthemum plants at Yazoo City on June 2, and on violet plants at Winona May 26.

DAHLIA

BLOSSOM ANOMALA (Anomala undulata Hels.)

Mississippi R. W. Harned (June 22): Anomala undulata was reported as causing serious damage to dahlia blooms at Conway on June 13.

HONEYSUCKLE

SAWFLY (Tenthredinidae)

Missouri A. C. Burrill (June 10): Sawfly larvae have appeared on Japanese vine honeysuckle.

IRIS

IRIS BORER (Macronoctua onusta Grote)

Ohio E. W. Mendenhall (June 7): The iris borer is quite prevalent at Columbus and vicinity, and south, this month, damaging iris.

LILAC

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.,

Massachusetts A. I. Bourne (June 20): Oyster-shell scale. An examination disclosed the fact that the young were crawling about the twigs of lilac by June 12-14, three or four days later than the corresponding record for apple.

HARLEQUIN BUG (Murgantia histrionica Hahn)

Texas F. C. Bishopp (April 16): An instance was observed in which they were present in lilacs in great numbers and caused the withering of all blooms before they fully opened.

MAHONIA

WALNUT SCALE (Aspidiotus juglans-regiae Comst.)

Ohio E. W. Mendenhall (May 31): Mahonia plants in a nursery in Cincinnati infested with Aspidiotus juglans-regiae Comst.

MARCISSUS

ALFALFA NEMATODE (Tylenchus dipsaci Ehn.)

Ohio E. W. Mendenhall (May 31): Found some damage to Marcissus at Columbus, Dayton and Piqua from the eelworm Tylenchus dipsaci. Another inspection will be made when lifted, then followed by treatment.

PHLOX

RED SPIDER (Tetranychus telarius L.)

Indiana J. J. Davis (June 2): The red spider has been abundant on phlox at La Fayette the past month.

RHODODENDRON

RHODODENDRON LACE BUG (Stephanitis rhododendri Harr.)

New York E. P. Felt (June 24): Rhododendron lace bugs, Leptobrysa explanata, are not very numerous at Rochester owing to persistent spraying. (R. E. Horsey.)

ROSE

ROSE APHID (Macrosiphum rosae L.)

Ohio E. W. Mendenhall (June 17): The rose aphids are quite bad this year over all the State. They attack rose plants in the terminal shoots.

ROSE CHAFER (Macrodactylus subspinosus Fab.)

- Indiana J. J. Davis (June 24): Rose beetles reported damaging rose and apple at Crown Point June 18, and attacking grape at LaGrange, June 20.
- Nebraska M. H. Swenk (April 25-May 25): The rose chafer was reported for the first time this spring from Grant County on May 20. Reports indicate that the beetles are to be very numerous in central Nebraska this year.

BRISTLY ROSE SLUG (Cladius isomerus Nort.)

- Ohio E. W. Mendenhall (June 14): The bristly rose slug, Cladius isomerus, is quite bad on roses this spring. Spraying with arsenate of lead is effective.

SUNFLOWER

GOLDENGLOW APHID (Macrosiphum rudbeckiae Fitch)

- Missouri A. C. Burrill (May 31): Macrosiphum rudbeckiae is increasing in great numbers on wild annual sunflowers, but not on the cultivated.

SWEET PEAS

APHIIDAE

- Alabama N. B. Johnson (May 24-25): Plant lice are serious on sweet peas causing the blooms to have the appearance of being stunted.

I N S E C T S A T T A C K I N G M A N A N D

D O M E S T I C A N I M A L S

MAN

CHIGGERS (Trombicula irritans Riley)

- Texas F. C. Bishopp (May 28): Chiggers began to appear in the vicinity of Dallas about May 15, and have been steadily increasing through the month.

MOSQUITOES (Culicidae)

- Indiana J. J. Davis (June 24): Mosquitoes have been reported as very annoying at Muncie and Indianapolis.

Montana

W. B. Mabey (June 17): Mosquitoes, Aedes dorsalis and others, are beginning to emerge in large numbers practically all over the State. The control campaign at Chinook and Malta is being rendered considerably more difficult by the high water of the Milk River which has covered practically the whole valley and will delay control operations. Indications are that mosquitoes will be considerably more of an economic problem this year than ever before.

FUSS CATERPILLAR (Megalonyx opercularis S. & A.)

Texas

F. C. Bishopp (May 15): The first adults of this species noted in this vicinity (Dallas) emerged on the above date. There is some indication that there will be a greater number of these stinging caterpillars than normal this season.

A TICK (Dermacentor andersoni ?)

Arkansas

H. H. Schwarzt (June 19): Seven cases of Tularaemia, two of which terminated fatally, have been reported in these two counties (Benton and Washington) during the past two months. Two cases were caused by tick bites, and the others by handling rabbits.

HORSES

HORSE BOT FLY (Gastrophilus intestinalis DeG.)

Texas

F. C. Bishopp (May 28): A few flies of this species have been active for several weeks, but the average infestation of eggs per animal probably does not exceed 300.

THROAT BOT FLY (Gastrophilus nasalis L.)

Texas

F. C. Bishopp (May 28): This insect has been annoying horses in this vicinity (Dallas) for some time. On the above date animals showed an infestation of several thousand eggs each.

CATTLE

SCREW WORM (Cochliomyia macellaria Fab.)

Texas

F. C. Bishopp (May 28): During May many complaints of an unusual number of screw-worm cases have come to this office. It appears that the screw worm conditions are considerably worse than the average for this time of the year. Much interest is manifested in flytrapping campaigns, and several of the county agents are aiding stockmen in this direction. (June 25): The screw worm has been unusually bad throughout southern and western Texas this year. There has been heavy loss among lambs and young calves in a number of areas. In some localities springer cows were shipped before calving in order to avoid losses from the screw worm. Large numbers of new cases appeared throughout June, and the showery

weather continued, thus indicating that screw-worm troubles will extend well into the summer.

STABLE FLY (Stomoxys calcitrans L.)

Virginia

F. C. Bishopp (May 4): A few stable flies were observed biting cattle in the vicinity of Leesburg. As yet they are causing very little annoyance.

Texas

F. C. Bishopp (May 28): This fly is causing some annoyance to dairy cattle, the number per head ranging from 10 to 75. There has been no material change in the abundance of the stable fly during the last month. (June 25): Stable flies are about normal in abundance. Some herds are bothered very little, while others are suffering considerable reduction in milk from the attack of these flies combined with horn flies.

HORN FLIES (Haematobia irritans L.)

Virginia

F. C. Bishopp (May 4): Horn flies are now present in considerable numbers on dairy herds in the vicinity of Leesburg and appear to be increasing rapidly. The number ranges from 10 to 75 per head.

Texas

F. C. Bishopp (May 28): Horn flies have not been so abundant on cattle in the vicinity of Dallas as would be expected from the climatic conditions. The number at this time ranges from 50 to 1,000 per head, but the average is apparently less than usual at this time of the year. Only a few dairymen are using fly sprays. (June 25): Early in June horn flies were very abundant in this vicinity (Dallas) and caused considerable losses to the dairymen. They decreased slightly toward the end of the month, and on this date the average number per cow ranges from 200 to 3,000. They are also causing great annoyance to range cattle in the vicinity of Menard. They are especially abundant along the river, where the cattle are keeping up a constant fight against them.

BLACK BLOWFLY (Phormia regina Meig.)

Virginia

F. C. Bishopp (May 5): A number of cases of maggots in wounds and in herds of cattle after dehorning have occurred in the vicinity of Leesburg recently.

OX WARBLE (Hypoderma bovis DeG.)

Virginia

F. C. Bishopp (May 4): A number of herds of cattle examined show an average infestation of this grub of about one per animal (Leesburg). Most of the grubs are mature, but some are still in the third instar.

MOSQUITOES (Culicidae)

Texas

F. C. Bishopp (May 28): Mosquitoes have been causing great worry to livestock in the bottom lands this spring. In some instances it was necessary to remove the cattle from the bottoms on account of the abundance of mosquitoes.

TUMBLE BUGS (Canthon sp.)

Texas

F. C. Bishopp (June 25): Tumble bugs are present in the section of Menard in tremendous numbers. They are completely breaking up the manure on the range, and in some instances they entered flytraps in great numbers.

POULTRY

CHICKEN MITE (Dermanyssus gallinae Redi)

Texas

F. C. Bishopp (May 28): Chicken mites have caused about the usual amount of annoyance and loss during the brooding season this year. They have been worse than normal where active control measures were not put into effect.

TURKEY GNATS (Simulium meridionale Riley)

Kansas

J. W. McColloch (May 27): Turkey gnats were sent in from Delphos where they were said to be causing some loss to chickens. The trouble was confined to farms on river bottom lands.

I N S E C T S I N F E S T I N G H O U S E S

A N D P R E M I S E S

HOUSE FLY (Musca domestica L.)

Texas

F. C. Bishopp (May 28): This fly has continued abundant throughout the spring, and has caused considerable annoyance about dairies and farm dwellings.

WEBBING CLOTHES MOTH (Tineola beselliella Hum.)

Nebraska

M. H. Swenk (April 25-May 25): More than the usual number of complaints of injury by webbing clothes moths have been received during late April and May.

FLEAS (Siphonaptera)

Indiana

J. J. Davis (June 2): Several reports of fleas infesting farms and other outbuildings were received the past month from the southern half of the State.

Texas F. C. Bishopp (May 28): About the usual number of cases of household and yard infestations of dog and cat fleas have been reported during the month of May. (June 25): Flea infestations of houses and outbuildings have occurred in about the usual number of cases throughout June.

BLACK CARPET BEETLE (Attagenus piceus Oliv.)

Nebraska M. H. Swenk (April 25-May 25): More than the usual number of complaints have been received of injury by the carpet beetle, Attagenus piceus, during late April and May.

LARDER BEETLE (Dermestes lardarius L.)

Nebraska M. H. Swenk (April 25-May 25): The larder beetle, Dermestes lardarius, was reported during the last week in April as overrunning the kitchen and pantry of a home at Utica in Seward County.

POWDER POST BEETLES (Lyctus sp.)

Indiana J. J. Davis (June 2): Powder post beetles, Lyctus sp., have been reported destructive to building timbers from Seymour, Hartford, Vevay, Wappanee, and Columbus.

SILVERFISH (Lepisma sp.)

Indiana J. J. Davis (June 24): Silverfish reported severely damaging rugs, drapes, and other furnishings, including doilies at Elnora.

CONFUSED FLOUR BEETLE (Tribolium confusum Duv.)

Texas F. C. Bishopp (June 25): A number of complaints of this insect have come to the laboratory from housewives. They have also caused considerable losses by infesting flour and similar products in stores where goods have been exposed for any length of time.

CLOVER MITE (Bryobia praetiosa Koch)

Nebraska M. H. Swenk (April 25-May 25): A report of a very annoying infestation of a residence in Omaha with the clover mite, Bryobia pratensis, was received during the first week in May.

BOOK LOUSE (Troctes divinatoria Mill.)

Texas F. C. Bishopp (June 25): A number of reports of book lice infesting furniture have been received at the laboratory during June.

SUCKING DOG LOUSE (Linognathus piliferus Britton)

Texas F. C. Bishopp (May 28): This louse is said to be quite common in the vicinity of Dallas during the spring. Numerous cases are reported by veterinary hospitals of this city.

ANTS (Formicidae)

Missouri

A. C. Burrill (June 14): Have prevented use of porch for over ten days from June 2 to 13. They appeared by the thousands and crawled over persons sitting on the porch. I think this record on swarming of nocturnal yellow ants (Iasius claviger) on a front porch is the first case of the kind where continuous swarming constituted a household annoyance. As is well known, the swarming of the winged sexes once or twice a year is too infrequent to constitute more than a one-day annoyance. The ants here recorded are notorious for keeping up their swarming activity after evening, for days and sometimes weeks. I have never taken this species in a dwelling and had never thought of this as a household pest, But I can see where their home is made under a stone porch, where slabs are laid in cement on sand after excavating soil so that the stone slabs are within 2 inches of the level of the soil. It made an ideal home so that they could swarm on all sides of the porch where people pass and prevent their using the porch for two weeks, during the period from 5 to 8 P.M. The workers of this species did not accompany any of the winged ants very far into the daylight.

Mississippi

R. W. Harned (June 22): The tiny black ant, Monomorium minimum Buckley, has been causing annoyance to a number of housekeepers in Starkville. One housekeeper stated that they seemed to be more fond of grease than anything else.

Mississippi

R. W. Harned (June 22): Specimens of the ill-smelling ant, Iridomyrmex analis Andre were sent to this office by State Plant Board inspector Chesley Hines, from Eden. He stated that they were infesting a house there. This species, Prenolepis (Mulanderia) sp., has been taken in a drugstore at Indianola recently. The ants were probably feeding on sweets, although the correspondent did not say so.

FIRE ANT (Solenopsis geminata Fab.)

Mississippi

R. W. Harned (June 22): Specimens of fire ants, Solenopsis geminata Fab., sent in from Ocean Springs were noted to be feeding on the fourth instar of the walnut caterpillar, Datana integerrima. The male and female phases of the fire ant have been observed to emerge from their nests at A. & M. College on May 24 and June 4.

ARGENTINE ANT (Iridomyrmex humilis Mayr)

Mississippi

R. W. Harned (June 22): Winged specimens of male Argentine ants were sent to this office from Pascagoula during the last of May. This species has recently been found at Orange Grove.

TERMITES (Reticulitermes spp.)

- Indiana E. J. Davis (June 2): Termites show the same activity and abundance as in former years and reports of damage to dwelling houses, public buildings, and greenhouses have come from many localities in the State.
- Missouri A. C. Burrill (June 8): About one-third of framework of house damaged by Reticulitermes flavipes. They seem to be in the heart of the timber.
- Nebraska M. H. Swenk (April 25-May 25): Last month reports of damage by the termite Reticulitermes tibialis Banks from Douglas, Nemaha, Lancaster and Phelps Counties were recorded. Since April 25, more reports of damage to buildings have been received from Julian and Auburn in Nemaha County, Falls City in Richardson County, Franklin in Franklin County, and Beaver City in Furnas County. Two residences at Franklin are reported as badly injured, while several houses and granaries are heavily infested in the Beaver City vicinity. (May 25-June 25): During the period covered by this report, additional instances of damage by termites have been received from Omaha, where they were seriously injuring a residence, from Franklin, Franklin County, where they were also injuring a residence and killing the elm shade trees about it, and from Ashland, Saunders County, where they were killing the trees on several properties in one section of the town.
- Kansas J. W. McCulloch (June 20): More termites than usual and injuring woodwork in dwellings and buildings. At Paxico the high school is infested. Dwellings have been injured at Lacrosse, Walefield, Lorraine, Frankfort, Manhattan (three houses). Buildings reported infested at Wamego, Frederick, Lorraine, and Larned. Fruit trees are being killed at Frederick.

T. E. Snyder (June 30): Number of Cases of Termite Damage to Buildings Mainly by Subterranean Species of Reticulitermes, July 1, 1926, to July 1, 1927, in the United States (and U. S. Insular Possessions) and nearby Tropics.

<u>State</u>	<u>Number of Cases:</u>	<u>State</u>	<u>Number of cases</u>
Alabama.....	2	Indiana.....	20
Arizona.....	4	Iowa.....	8
Arkansas.....	5	Kansas.....	146
California.....	69	Kentucky.....	11
Delaware.....	3	Louisiana.....	35
District of Columbia.....	81	Maryland.....	26
Florida.....	8	Massachusetts.....	3
Georgia.....	5	Mexico.....	2
Territory of Hawaii.....	16	Michigan.....	5
Illinois.....	29	Mississippi.....	8
		Missouri.....	163
		Nebraska.....	47

<u>State:</u>	<u>Number of cases</u>	<u>State</u>	<u>Number of cases</u>
New Hampshire.....	6	Pennsylvania.....	19
New Jersey	5	Rhode Island	1
New Mexico	1	South Carolina	19
New York	16	Tennessee	12
North Carolina	19	Texas	17
Ohio	25	Virginia	18
Oklahoma	8	West Indies	
Canal Zone, Panama	4	(Hayti, Cuba, etc.).....	6
		West Virginia	6

CRICKETS (Gryllidae)

Indiana

J. J. Davis (June 2): Crickets were reported April 22 from Lafayette as annoying in houses.

CARPENTER BEE (Xylocopa virginica Drury)

Kansas

J. W. McColloch (June 20): A report of injury to the woodwork in a house was received from Uniontown on June 11 and from Saffordville on June 17.

A CURCULIONID BEETLE (Hexarthrum mulkei Horn)

District of
Columbia

(Monthly Letter of Bur. of Ent. No. 157, May, 1927): On May 8 Wm. Middleton and T. E. Snyder inspected coniferous timbers recently removed from the roof of the White House. The roof was so greatly weakened that it had to be replaced. It was found that the timbers of the roof had been powderposted by a cossid, Hexarthrus mulkei Horn. This insect has caused similar injury to buildings in New York and Washington, and has also damaged flooring in houses in Washington.

A WASP (Stigmus fulvicornis Rohrer)

Mississippi

R. W. Harned (June 22): A pemphredonid wasp, Stigmus fulvicornis, is doing considerable damage to the piazza floor of a home in Starkville. The wasp constructs small holes about the size of the head of a pin in the flooring in which it appears to be breeding. A number of specimens were noted to be carrying aphids in their mouths which were evidently the food for their young. Several aphids taken from the wasps appeared to belong to at least three different species, one of which A. L. Hamner thought was Myzus persicae. This is the second house known to be attacked by the wasps and so far as the writer knows the species has never been reported to be of economic importance before this.

STORED - PRODUCTS INSECTS

BEETLES (Coleoptera)

Nebraska

H. H. Swenk (May-25-June 25): Reports of injury by stored-grain pests have been much fewer than usual during the period covered by this

report. Those that have been received relate mostly to the several common species of grain beetles.

THE INDIAN MEAL MOTH (Plodia interpunctella Hubn.)

Nebraska

M. H. Swenk (April 25 - May 25): The Indian meal moth continues to be much complained of.

THE FLOUR MITE (Tyroglyphus farinae DeGeer)

Nebraska

M. H. Swenk (May 25 - June 25): In Scottsbluff County a potato cellar with a roof built of alfalfa, sweet clover hay, and barley straw became so heavily infested with the flour mite, Tyroglyphus farinae, that these creatures swarmed over the whole interior and formed a layer on the floor an inch or two deep in spots.